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First annual report for the year ended June 30, 1985

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PENSION

RESERVES

INVESTMENT

TRUST

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#### Overview

Created by Chapter 661 of the Acts of 1983, the Pension Reserves Investment Management (PRIM) Board is charged with the responsibility of investing and reinvesting the assets of the Pension Reserves Investment Trust (PRIT) Fund. The PRIT Fund is a pooled investment fund consisting of the reserve funds of the State Employees' and Teachers' Retirement Systems, as well as the total assets of the participating public employee retirement systems.

The PRIT Fund's primary investment objective is to accumulate assets through investment earnings, state assistance, and other revenue sources sufficient to aid participating systems in meeting their future retirement obligations.

The major benefit accruing to a retirement system participating in the PRIT Fund is a share of an annual state appropriation. The size of its share is determined by the proportion the assets of the local system bears to the total assets of the Fund. The monies are credited to the account of the system, where they accumulate and will eventually amortize the system's unfunded pension liability.

The PRIM Board's investment decisions are guided by the "prudent person rule" which provides greater flexibility than the prior statutory restrictions.



Statement by the Chairman and Executive Director

With the enactment of Chapter 661 of the Acts of 1983, a significant step was taken to change Massachusetts' public employee pension law. The Pension Reserves Investment Management (PRIM) Board, established by that statute, administers the Pension Reserves Investment Trust (PRIT) Fund, a pooled investment trust in which Massachusetts public employee retirement systems can invest on a voluntary basis.

This legislation and an earlier companion piece (Chapter 630 of the Acts of 1982) were enacted as the result of a detailed study by a special legislative commission. That study found that Massachusetts retirement systems were on the verge of a fiscal crisis due to a pay-as-you-go funding method and severe constraints on investment flexibility.

In order to rectify this situation, the Public Employee Retirement Administration (PERA) was created and most investment restrictions were lifted. With the approval of that agency, these local systems were allowed to invest pursuant to the 'prudent person' rule. The State Employees' and Teachers' Boards, as well as the PRIM Board, were permitted to invest pursuant to the prudent person rule.

The legacy of the pay-as-you-go policy is an unfunded pension liability of approximately \$11 billion. State and local governments owe \$11 billion in future benefits to employees and retirees for which no money is presently available. This situation provides PRIM/PRIT with its overall goal: to increase assets through higher earnings and thereby stabilize and ultimately reduce future pension costs.

The PRIM Board began operations on October 1, 1984 with this goal in mind. In this report we will outline the activities of the Board to date and preview our objectives for the coming year.

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Our first year

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State Treasurer Robert
Q. Craue, Chairman of
the Pension Reserves
Investment
Management Board,
and Paul F. Quirk, the
Board's Executive
Director.



#### Advisors to the Fund

The Board determined that its first priority, after assembling the senior staff, was to obtain the services of an advisor to provide consultation regarding the full range of investment management decisions.

The immediate tasks of this advisor would be to:
analyze the financial condition of the participating systems

develop a strategic asset allocation

establish an investment structure, investment policies and manager guidelines

assist in the search and selection process for money managers provide accurate and effective performance measurement and evaluation

After a comprehensive search, the Board engaged Wilshire Associates of Santa Monica, California. Wilshire's broad array of available advisory services as well as their hands-on experience as advisors to large public pension funds across the country were the determining factors in this decision.

Similar searches were also conducted to obtain the services of external auditors and a master trustee. The firm of Arthur Andersen & Co. was hired to perform audit services. State Street Bank was retained to perform master trust services.



The Board keeps in constant contact with investment managers and fund advisors in order to ensure the timely and accurate delivery of services.



Analysis of existing financial condition

The first step in the process of developing a modern well-diversified portfolio was the in-depth analysis of the financial condition of all retirement systems at the state and local levels. Studying the financial condition of these systems provided the framework for setting the PRIT Fund's asset allocation. Generally, if a fund has a low asset base compared to its liabilities, a more aggressive investment policy is employed with the expectation of earning a higher return, which will help reduce future unfunded liabilities.\*

The major results of this study were:

- Pension benefit dollars are expected to grow by 7–8% per year primarily as a result of a proportionate increase in the number of retirees.
- 2 Total liabilities on average exceed assets by a ratio of approximately 3 to 1.
- 3 Unfunded liabilities will continue to increase over the next ten years absent a major change in funding rates by most plans (State and local).
- 4 Current asset allocations (heavily weighted in bonds) in all plans statewide are more conservative than either the average public or private plan.

These results led the PRIM Board to develop an asset allocation designed to maximize return while minimizing risk.



Though style differs,
all of the investment
managers hired by the
Board have in common
a thorough research and
review process, and an
experienced professional
staff to guide their
investment decisions.



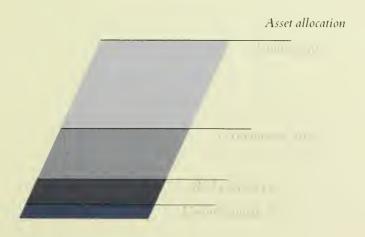
Asset allocation and investment strategy

A sophisticated model of pension finance was used to project the system's key characteristics 5–10 years into the future, identifying how contributions, assets and liabilities would be affected by the different rates of return achieved by various asset allocations.

Central to this process was the formulation of expected rates of return for the various asset classes: equities, fixed income, real estate and venture capital. In addition, the standard deviation (a measure of the volatility or potential up and down movement in return) of each asset category from the expected return was considered.

Once return and risk assumptions were developed and tested, six alternative asset combinations were formulated in order to construct an asset allocation containing an "optimal" trade off between return and risk. The asset allocation adopted by the Board was: equities: 50%; fixed income: 30%; real estate: 15%; venture capital: 5%.

Each of these percentage goals is flexible within a range in order that adjustments can be made when market conditions warrant. This asset allocation projects an expected return of 11%, which is 3% greater than the present actuarial assumptions of the State's retirement systems. Current allocations of those systems can be expected to produce a return of 8.3% over a market cycle.





Integral to the investment process is efficient access to the marketplace. All of the Board's fund managers utilize state-of-the-art telecommunication and data processing equipment to inform and implement their investment decisions.



The equity market

The implementation of the asset allocation began immediately. Initially, the most important area of focus was the equity component of the portfolio. Since the PRIT portfolio was typical of all other retirement system portfolios in the state i.e., heavily concentrated in fixed income obligations, restructuring was required.

As a first step in this process, the Board placed \$75,000,000 in an index fund. This passive core vehicle was chosen for two reasons: immediate diversity into the equity market without the volatility associated with active management;

substantially reduced management fees and transaction costs.

Building upon this core, the actively managed portion of the equity allocation was structured to maximize the diversification of investment styles. After screening over 350 candidates, based on a variety of criteria (performance, public fund experience, size, investment philosophy, and staff experience) twelve finalists were selected for interviews.

During these interviews emphasis was placed on a detailed explanation of the investment philosophy of the firm and the process by which that philosophy translated into portfolio development. A thorough analysis of transaction costs and fee proposals associated with each finalist was also undertaken.

Six managers were selected by the Board, each to manage a discretionary equity account, beginning on July 1, 1985.



Of crucial importance to the investment decision-making process is the experienced professional.



The bond market

Over the last decade, tremendous changes have occurred in the dynamics of the bond market, as well as in the management of bond portfolios. This is a reflection of the large swings in interest rates experienced during recent years and the change in investor perceptions about bonds which traditionally were used to dampen portfolio volatility.

Similarly, statistics show that over the last five year period ending June 30, 1985, the average bond manager only equalled the return of the most widely used and accepted bond index (Shearson Lehman Government/Corporate Index). Over the last three year and one year periods, the average manager underperformed the Index.

The Board determined that it would address this new reality in two specific ways. First, by establishing a core portfolio of bonds, passively managed and designed to match the performance of the bond index. This portfolio would then be enhanced and diversified by hiring investment managers with specialized expertise in a particular sector of the bond marketplace (mortgage pass-thrus, convertibles, high yield bonds, etc.).

A search and selection process similar to that conducted for equity managers was undertaken and completed on September 2, 1985, with the selection of four investment firms.



Timely performance
evaluation, the measure
of a fund's success,
necessitates ready access
to sophisticated data
processing equipment
and services.



#### Special initiatives

The effects of transaction costs and investment management fees have become prominent factors in the assessment of investment performance. The generally accepted industry practice is for pension funds to report performance numbers net of all fees, taking into account both yield and market appreciation in the calculation.

The Board has been, and will remain, fee sensitive in its dealings with investment managers, and has taken an aggressive stance on the containment and reduction of transaction costs in several innovative ways.

An example of this philosophy was the placement of a \$75,000,000 equity index fund with Alliance Capital Management Corporation. The total transaction cost (defined as commission costs plus market impact) incurred to establish the fund was 3.8¢ per share on a total volume of 2,129,150 shares.

Approximately 44.2% of the share volume was purchased from two out-of-state pension funds at a total cost of 1¢ per share. The remainder of the trade was done on a packaged bid basis at 6¢ a share. Net savings on this transaction alone were \$99,082 based upon the industry average commission cost of 8¢ per share. If market impact (traditionally the greater cost component in such transactions) was quantified, realized savings to the fund would be even more substantial.

Working with our auditors and master trustee, a detailed record keeping system was developed and put into place to ensure timely and accurate reporting. Our performance evaluation calculations take into account both yield and market appreciation. This enables the Board to compare its performance to recognized market indices, thereby providing an objective benchmark of our management expertise. Since the other public retirement systems in the state will be reporting in this manner, valid performance comparisons with these funds will also be possible.



The Board's ultimate goal is to provide retirement security to the public employees of the Commonwealth by reducing the unfunded liabilities threatening their retirement systems.

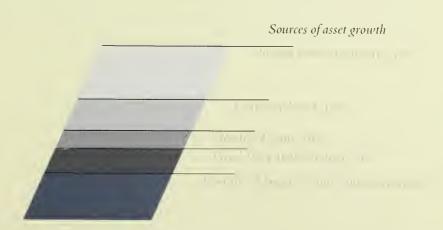


The Weymouth experience

The Town of Weymouth provides an interesting case study of the benefits available to PRIM/PRIT participants. Prior to the enactment of Proposition 2½, Weymouth had set aside approximately \$300,000 in a reserve fund to address an unfunded liability totalling \$35,000,000. The constraints of Proposition 2½ forced the Town to curtail contributions to this reserve.

After a careful review, Town officials determined that the benefits of PRIM/PRIT participation would enable them to continue their funding program. As a result of this decision, the Town of Weymouth has received additional reserve funding in the amount of \$442,500 to date. A like amount will be credited to their account in fiscal 1986. Weymouth is well on its way to fulfilling its reserve funding schedule.

Additionally, Weymouth receives a proportionate share of the return realized on PRIM/PRIT's diversified portfolio which in the first year has increased the market value of its assets by over \$400,000.



In conclusion

We are very proud of our accomplishments and are enthusiastic about the future.

Our major goal in the second year of operation is to complete the restructuring of the investment portfolio. This fully-diversified investment portfolio is designed to maximize investment returns, thereby continuing the process of reducing our unfunded liabilities.

The consistent support we have received over the past year in these endeavors from both the Executive and Legislative branches of State government has been most helpful and is appreciated. With their continued support, we will be able to build upon our record.

Robert Q. Crane, Treasurer

Paul F. Quirk, Executive Director

Robert Q. Crane

Jane F. Suit



\$566,794,189

Balance sheet June 30, 1985

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Assets

Liabilities

Net assets

June 30, 1903	
Investment in securities, at market value	
(cost of \$524,294,108—see Schedule of	
investments)(Note 2):	
U.S. Government agency and Treasury	
obligations	\$275,882,121
Money market investments	185,261,939
Equity investments	81,311,590
Fixed income investments	15,668,347
Total investments	\$558,123,997
Cash	188,044
Dividend and interest income receivable (Not	te 2) 8,925,935
Other assets	379,530
Total assets	\$567,617,506
Brokerage and management fees payable	\$ 100,000
Payable for investments purchased	271,519
Other liabilities	451,798
Total liabilities	\$ 823,317
Capital Fund units (530,250,521 units outstand	ing
at June 30, 1985)(Notes 1 and 2)	\$532,964,303
Cash Fund units (o units outstanding at June 30	,
1985)(Notes 1 and 2)	_
Net unrealized gain on investments	33,829,886

The accompanying notes are an integral part of these financial statements.

Total net assets (equivalent to \$1.07 per unit based

on 530,250,521 units outstanding)

# Statement of operations For the period from October 1, 1984\* to June 30, 1985

In content in ome	Interest	\$ 36,216,205
	Dividends	1,421,123
	Total investment income	\$ 37,637,328
	Less: Brokerage and management fees (Note 3)	747,965
	Net investment income	\$ 36,889,363
Realized and	Realized gain on investments	\$ 12,173,986
unrealized gain on	Increase in unrealized gain on investments	33,829,886
investments	Net gain on investments	\$ 46,003,872
	State appropriations (Note 1)	\$ 17,700,000
	Increase in net assets resulting from operations	\$100,593,235

The accompanying notes are an integral part of these financial statements.
\*October 1, 1984 represents commencement of operations.



# Statement of changes in net assets For the period from October 1, 1984\* to June 30, 1985

From operations	Net investment income	\$ 36,889,363
	Realized gain on investments	12,173,986
	Increase in unrealized gain on investments	33,829,886
		\$ 82,893,235
	State appropriations (Note 1)	17,700,000
	Increase in net assets resulting from operations	\$100,593,235
Distributions to	Net investment income	\$ (36,889,363)
member systems from	Realized gain on investments	(12,173,986)
	State appropriations	(17,700,000)
	Total distributions to member systems	\$ (66, 763, 349)
From capītal unit	Proceeds from original unit sales	\$447,100,705
transactions	Proceeds from subsequent unit sales	21,095,249
	Net asset value of units issued to member	
	systems in reinvestment of net investment	
	income, realized gain and state appropriations	66,763,349
	Cost of units repurchased	(1,995,000)
	Increase in net assets derived from capital unit	
	transactions	\$532,964,303
	Total increase in net assets	\$566,794,189
Net assets	Beginning of period	
	End of period	\$566,794,189

The accompanying notes are an integral part of these financial statements.

\*October 1, 1984 represents commencement of operations.

6,205 1,123

7,965 9,363

3,986 9,886 3,872 9,000 3,235

#### Notes to financial statements, June 30, 1985

The Pension Reserves Investment Trust Fund (PRIT) was created in 1984 by the Commonwealth of Massachusetts through legislation (Chapter 661 of the Acts of 1983) to serve as the investment portfolio for the assets of state and local retirement systems joining PRIT. The Pension Reserves Investment Management Board (the Board) was created by the same legislation to manage PRIT. Operations of PRIT began October 1, 1984 with the first systems to join as Participating Systems (see below) being the State Employees' and Teachers' Retirement Systems Pension Reserve Fund (Massachusetts Reserve) and the Town of Weymouth Contributory Retirement System. In addition, the Town of Shrewsbury and the Minuteman Vocational Technical School Contributory Retirement Systems transferred their assets to PRIT to become Purchasing Systems in May and June 1985, respectively.

Systems joining PRIT have the option to be Participating or Purchasing Systems. Participating Systems must transfer all of their retirement system assets to PRIT. Those systems qualifying as Participating Systems share in the annual appropriation made to PRIT by the Commonwealth of Massachusetts based on the Participating System's net assets in PRIT at the beginning of the fiscal year. In fiscal 1985, the Massachusetts Reserve and the Town of Weymouth Contributory Retirement System, as qualifying Participating Systems, shared in the Commonwealth's fiscal 1985 appropriation which totaled \$17.7 million. Purchasing Systems, along with the Participating Systems, share in the investment earnings of PRIT based on their proportionate share of net assets (see Note 2).

PRIT consists of two funds, the Capital Fund and the Cash Fund. The Capital Fund serves as the long-term asset portfolio. The portfolio asset allocation plan includes stocks, bonds, real estate and venture capital. The Cash Fund consists of short-term investments which are used to meet the liquidity requirements of the various Participating and Purchasing Systems.

During the period from October 1, 1984 to June 30, 1985, only the Capital Fund was operational. All unit sales and repurchases, therefore, were made through this fund. The Cash Fund began operating on July 1, 1985.



Nete≥ Summar of significant accounting policies

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The following is a summary of significant accounting policies followed by PRIT, which are in conformity with those generally accepted in the investment company industry:

Valuation of investments Security transactions are recorded on the trade date of the securities purchased or sold. The cost of a security is the purchase price or, in the case of assets transferred to PRIT by a new system, the market value of the securities on the transfer date. The Capital Fund is valued at month end while the Cash Fund is valued daily. Investments in bonds and United States Government agencies and Treasury obligations are valued by an independent pricing service. In determining the price, the service reflects such factors as security prices, yields, maturities and rating, supplemented by dealer quotations. Money market funds and other short-term investments are recorded using the amortized cost method, which approximates market value. Investments in equity securities traded on national securities exchanges are valued at the last sale price, or, if no sale, at the closing bid price. Securities traded on any other exchange are valued in the same manner, or, if not so traded, on the basis of closing over-the-counter bid prices. Dividend income is recorded on the ex-dividend date and interest income is recorded when earned.

Gains and losses from sales of investments are calculated on the average cost method.

Capital units Capital Fund: The number of capital units resulting from the initial transfer of a retirement system's assets to PRIT or from the subsequent sales or repurchases of units is calculated by dividing the market value of the assets involved by the unit price at the end of the month.

Net investment income and net realized gains are reinvested in units at the end of each month as follows:

Net investment income and net realized gains for the month are allocated between the systems based on their proportionate share of the net assets at the beginning of the month.

The allocated portions are then divided by the beginning of the month unit price, adjusted for the change in unrealized appreciation (depreciation) of investments during the current month, to determine each system's incremental number of units.

If the Capital Fund incurs net realized losses, the losses are allocated between the systems using the same method as for gains, thereby reducing the number of units held by each system.

Cash Fund: Sales and repurchases of capital units by the systems will be recorded in the Cash Fund on the trade date at the fund's daily price of approximately \$1.00 per unit. Net investment income is allocated daily between the systems based on their proportionate share of net assets on the previous day, adjusted for the current day's sales and repurchases of units. The allocated portions are then reinvested in units at month end at the daily fund price of approximately \$1.00.

#### Notes to financial statements, continued

Note 3. The Board In accordance with the Board's Operating Trust, all expenses incurred by the Board in managing PRIT are charged to PRIT in the form of brokerage and management fees. These fees primarily consist of investment custodian fees, investment management fees, professional fees, trading commissions and salaries.

Wilshire Associates (Wilshire) serves as the pension investment consultant for the Board. Wilshire provides comprehensive pension investment consulting services including recommendations on asset allocation; development of objectives, policies and guidelines for the Board and for the individual investment managers selected by the Board; assistance in the screening, interviewing and selection of investment managers; and measurement of external and internal performance for PRIT and the individual investment managers. As compensation for its services, Wilshire receives a fixed monthly fee of approximately \$10,400. Wilshire's compensation totaled approximately \$67,700 for the period ended June 30, 1985.

Alliance Capital Management Corporation (Alliance) serves as the investment manager of certain PRIT assets totaling approximately \$81 million as of June 30, 1985. Alliance is responsible for the investment and reinvestment of these assets in a Standard and Poor's Index of 500 Common Stocks Fund. As compensation for its services, Alliance receives an annual fee of .06% of the asset value managed. Alliance's compensation totaled approximately \$18,000 for the period ended June 30, 1985. During fiscal 1985, Alliance was the only outside investment manager contracted by the Board. As of July 1, 1985, the Board hired five additional investment managers.

State Street Bank and Trust Company (State Street) serves as the PRIT investment custodian and recordkeeper. State Street records all daily transactions for PRIT, including investment sales and purchases, investment income, expenses paid by PRIT and all capital unit activity for the PRIT member systems. State Street also has physical custody of PRIT's assets. State Street receives an annual fee of \$7,000 per actively managed portfolio plus an annual asset fee based on the market value of PRIT. The annual fee is calculated as follows:

- .02% on the first \$500 million .015% on the next \$500 million .01% on the balance
- State Street's compensation totaled approximately \$65,500 for the period ended June 30, 1985.

During the period October 1, 1984 to June 30, 1985, the cost of investments purchased and the proceeds from investments sold, excluding temporary investments, were \$565,408,803 and \$345,268,819, respectively.

Note 4



Note 5.
Subsequent events

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Subsequent to June 30, 1985, the Contributory Retirement Systems of the Town of Shrewsbury and Minuteman Vocational Technical School became Participating Systems. In addition, the Contributory Retirement Systems of the Towns of Wakefield and Needham transferred the assets of their respective plans to PRIT as of July 1, 1985 and became Participating Systems. The approximate market values of these assets at the date of transfer were \$8.3 and \$15.4 million, respectively.

The fiscal year 1986 State appropriation to be allocated among the Participating Systems in PRIT as of July 1, 1985 is budgeted by the Commonwealth of Massachusetts to be \$21.5 million.

To the Pension Reserves Investment Management Board and Member Systems of the Pension Reserves Investment Trust Fund:

Report of the independent certified public accountants

We have examined the balance sheet and schedule of investments of the Pension Reserves Investment Trust Fund (a statutorily created entity established with the enactment of Chapter 661 of the Acts of 1983) as of June 30, 1985 and the related statements of operations and changes in net assets for the period October 1, 1984 (commencement of operations) to June 30, 1985. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances, including confirmation of investments owned at June 30, 1985 by correspondence with the custodian.

In our opinion, the financial statements referred to above present fairly the financial position of the Pension Reserves Investment Trust Fund as of June 30, 1985 and the results of its operations and the changes in its net assets for the period October 1, 1984 to June 30, 1985, in conformity with generally accepted accounting principles.

August 12, 1985.

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## Schedule of investments, June 30, 1985

			Mankat				26.1.
Shares	Equity investments	Cost	Market value	Shares		Cost	Market value
Onares	Equity mivestiments	2030	varue	Shares		Cost	value
	Basic industries				Consumer basics		
10,800	Alcan Aluminium			3,600	Albertsons, Inc.	\$ 102,887	\$ 115,200
0 000	Ltd.	\$ 333,075	\$ 271,350	6,000	American Brands,	- 9	
8,900 8,900	Allied Corp. Aluminum Co. of	343,852	379,362	8,900	Inc. American Medical	383,125	399,750
0, 900	Anierica	338,289	304,825	0,,00	International, Inc.	201,975	231,400
3,700	Ascaro, Inc.	83,750	74,000	3,500	American Stores		
1,700	Ball Corp. Bethlehem Steel	83,863	94,138	10 600	Co. Archer Daniels	174,160	233,625
5,100	Corp.	98,863	82,238	10,600	Midland Co.	226,637	257,050
5,300	Campbell Red	,,,,,,,	02,230	2,800	Bard (C.R.), Inc.	86,884	98,700
	Lakes Mines Ltd.	97,975	110,638	3,500	Campbell Soup Co.	224,562	268,625
973	CF&I Steel Corp.	18,607	18,607	2,900	Clorox Co.	87,000	109,112
4,600	Corning Glass Works	174,225	203,550	3,600 5,500	Conagra, Inc. General Foods	106,200	138,150
3,000	Crown Zellerbach	- 74,5	3,550	,,,,,,,	Corp.	307,875	445,500
	Corp.	100,500	118,875	5,000	General Mills, Inc.	277,750	318,125
10,200	Dome Mines Ltd. Great Northern	85,675	75,225	3,200	Gerber Products Co.	82,000	110,800
2,000	Nekoosa Corp.	98,434	107,800	5,500	Great Atlantic &	82,000	110,800
5,900	Hercules, Inc.	213,934	207,975	3,3	Pacific Tea, Inc.	85,305	88,687
5,400	Homestake Mining			7,500	Heinz (H. J.) Co.	327, 262	409,687
10,800	Co. INCO Ltd.	120,879	132,300 143,100	3,400	Hershey Foods Corp.	129,975	160,650
3,400	Inland Steel Co.	85,034	75,225	9,600	Hospital Corp. of	129,973	100,030
5,500	International Paper	J. J.	, , , ,		America	440,400	465,600
	Co.	292,875	269,500	10,700	Humana, Inc.	307,732	361,125
5,100	Kaiser Aluminum & Chemical Corp.	81,975	67,575	4,900 5,600	Kroger Co. Lucky Stores, Inc.	189,551 104,050	222,337 I 27,40I
3,400	Mead Corp.	131,750	143,650	2,200	MEl Corp.	84,312	85,251
2,500	National Inter-			7,700	National Medical		
2 100	group, Inc.	82,725	67,187		Enterprises	213,752	243,512
2,400 7,700	Nucor Corp. PPG Industries,	81,672	.88,200	13,500 4,800	Philip Morris, Inc. Pillsbury Co.	1,137,511	1,152,562 259,200
/,/	Inc.	296,528	322,438	18,300	Procter & Gamble	,	-57,
2,300	Reynolds Metals				Co.	1,020,000	1,029,375
6 300	Co. Scott Paper Co.	92,575 192,178	78,775 218,625	4,500 9,500	Quaker Oats Co. Ralston Purina Co.	167,671 344,875	234,562 422,750
5,300 2,600	Stone Container	192,170	210,023	6,500	Safeway Stores,	344,073	422,/30
	Corp.	83,200	71,175		Inc.	184,437	220,187
5,400	Union Camp Corp.	203,229	200,475	6,000	Sara Lee Corp.	200,250	258,751
3,100	Westvaco Corp. Williams Cos.	126,325 110,713	119,350 108,300	5,200 4,100	Southland Corp. Super Value Stores,	159,302	193,701
3,000	w miams Cos.			4,100	Inc.	134,275	156,825
		\$ 4,204,008	\$ 4,154,458	3,500	Unilever N.V.	325,062	362,687
	Capital goods			4,500	Winn Dixie Stores, Inc.	152,600	164,250
2,700	Briggs & Stratton				mc.		
-,,,,,	Corp.	\$ 82,350	\$ 76,275			\$ 8,172,225	\$ 9,345,137
3,200	Cincinnati				Consumer		
3 .00	Milacron, Inc. Crane Co.	83,200	66,400 88,800		durable goods		
2,400	Cross & Trecker	64,793	88,800	3,000	Fleetwood Enter-		
3,	Corp.	84,426	76,500		prises, Inc.	\$ 84,030	\$ 65,250
7,600	Emerson Electric			6,000	Genuine Parts Co.	216,060	201,000
2,000	Co. Ex-Cell-O Corp.	576,726 82,000	557,650 77,750	2,900	Goodrich (B. F.) Co.	85,213	92,437
3,200	Grainger (W. W.),	02,000	//,/30	1,700	Maytag Co.	82,275	88,825
	Inc.	106,016	107,600	3,600	Sealed Power Corp.	86,958	93,150
4,400	Harris Corp. of	0	13.00	2,200	Snap On Tools	85,800	85,800
12,000	Delaware Signal Cos., Inc.	148,500 417,120	124,850 508,500	4,000	Corp. Whirlpool Corp.	183,250	191,001
5,400	Waste Manage-	4-7,120	300,300	2,700	White Consoli-	3,-33	
	ment, Inc.	270,054	328,050		dated Industries,	0	
		\$ 1,915,185	\$ 2,012,375		Inc.	84,375	73,912
						\$ 907,961	\$ 891,375

2.1 13.8 13.8 13.2 13.2 2.6 5.6

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### The Pension Reserves Investment Trust Fund

Market

15,200 99,750 31,400

98,700 98,700 268,623 109,112 138,130

445,500 318,125

110,800

88,687 409,687

160,650

465,600 361,125 222,337 127,401 85,251

243,512 152,562 259,200

029,375 234,562 422,750

220,187 258,751 193,701

362,687 164,250 ,345,137

65,250 201,000

92,437 88,825 93,150 85,800 191,001

891,375

			Market				Market
Shar	es	Cost	value	Shares		Cost	value
	Consumer				Consumer services		
	non-durables			5,500	AMF, Inc.	\$ 86,265	\$ 101,750
2,30	oo Allied Stores Corp.	\$ 121,562	\$ 137,425	2,400	Brunswick Corp.	92,124	88,500
15,60	oo Anheuser Busch	386,800	495,300	4,800	Church's Fried		
1,70	oo Associated Dry				Chicken, Inc.	81,600	85,800
	Goods Corp.	98,829	114,325	4,400	Delta Air Lines,		
8,80					Inc.	191,994	215,600
	Inc.	203,500	188,100	3,700	Disney (Walt)		
2,70					Productions	273,838	347,338
	Distillers Corp.	87,925	97,200	4,100	General Cinema		0 4
2,80		83,300	82,250		Corp.	129,050	158,363
3,20	e e e e e e e e e e e e e e e e e e e		0	3,200	Hasbro, Inc.	84,150	124,000
. 0.	tries, Inc.	90, 1 50	85,200	2,800	Hilton Hotels	.6. 0=0	. 02 040
3,80	oo Collins & Aikman Corp.	83,600	83,125	6,800	Corp. Mattel, Inc.	164,878	183,050
4,70		83,000	03,123	5,300	MCA, Inc.	84,354 247,937	113,900 317,337
4,/	Co.	81,662	86,362	9,600	McDonalds Corp.	571,296	657,600
10,70		01,002	00,302	2,400	N. W.A., Inc.	108,924	129,900
, /,	Corp.	390,657	452,075	3,000	Outboard Marine	-00,924	- 27,700
4,10		131,312	121,975	3,	Corp.	88,530	68,250
5,30		3 ,0	.,,,,	11,200	Ramada Inns, Inc.	81,200	84,000
2.5	ment Stores, Înc.	296,762	337,875	3,100	Shoneys, Inc.	85,637	93,388
2,70	oo Hartmarx Corp.	87,075	97,875	10,000	Tandy Corp.	307,650	357,500
1,60	oo Interco, Inc.	103,387	106,800	7,999	Wendys Interna-		
13,80		572,838	529,575		tional, Inc.	114,000	137,982
4,00		131,014	141,000			\$ 2,793,427	\$ 3,264,258
13,20		207,966	330,000			Ψ 2,/93,42/	Ψ 3,20 <b>4,</b> 230
2,60		81,900	120,900		Energy		
5,60	_ '_ '		.0.000		0,		
. 0	Co., Inc.	259,756	289,800	9,100	Amerada Hess	0 266 127	200 212
4,80	oo May Department Stores Co.	220.448	267,000	30,100	Corp. Amoco Corp.	\$ 255,437	\$ 258,212
5,80		230,448 240,758	278,400	26,400	Atlantic Richfield	1,742,253	1,930,162
1,6		240,/30	270,400	20,400	Co.	1,199,625	1,580,700
1,0	Inc.	96,613	108,000	3,400	Coastal Corp.	108,902	108,375
3,3	oo National Distillers	, , , , ,	,	3,300	Eastern Gas & Fuel	,,	,3,7,5
3,3	& Chemicals	84,762	106,837	3.3	Assoc.	83,537	75,487
1,8	00 Noxell Corp.	83,476	98,775	6,100	Enserch Corp.	178,812	154,025
8,20	oo Penney (J. C.), Inc.	400,550	422,300	11,900	Halliburton Co.	371,651	348,076
3,4	oo Polaroid Corp.	91,409	107,101	6,100	Hughes Tool Co.	92,263	80,825
4,0		110,540	99,001	5,800	Kerr McGee Corp.	173,550	169,650
4,5		132,350	120,937	3,000	Louisiana Land &		
10,1		423,450	427,987		Exploration Co.	107,275	96,750
39,7		x 106 060		4,100	McDermott Inter-		10/ (2-
4.2	Co. Stevens (J. P.) &	1,406,268	1,523,487	7 100	national, Inc. Mesa Pete Co.	121,175	106,600 110,076
4,2	Co., Inc.	83,876	93,450	7,400 7,200	NL Industries, Inc.	130,499 82,400	78,300
8,9		267,089	356,000	5,200	Pennzoil Co.	230, 152	265,200
15,4	· · · · · · · · · · · · · · · · · · ·	207,039	3,0,000	7,100	Pittston Co.	84,650	79,875
Э, т	Inc.	704,705	841,225	8,300	Rowan Cos., Inc.	83,375	70,550
6,8		175,134	187,850	29,500	Royal Dutch Petro-	3,375	, ,55-
3,4	oo Woolworth (F. W.)				leum Co.	1,563,795	1,725,750
	Co.	145,700	159,800	33,700	Schlumberger Ltd.	1,348,095	1,301,663
		\$ 8,177,123	\$ 9,095,312	4,500	Sonat, Inc.	150,795	162,000
		- 0,1//,123	- 7,073,312	12,400	Sun, Inc.	611,337	618,450
				5,800	Texas Eastern		
					Corp.	171,100	195,750
				23,200	Texas Oil & Gas		
				11.000	Corp. Unocal Corp.	452,632	379,900
				7,900	Walker (Hiram)	491,624	339,270
				7,900	Resources Ltd.	159,975	176,762
					resources Etu.		
						\$ 9,994,909	\$10,412,408

## Schedule of investments, continued

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4.86 3,11 12.46 4.66

§,30 },90 §,20

> 3,700 15,300 3,400

Finance				Market				Market
Actna Life & Casulty Co.   8   476,709   8   500.175   3,300   American Broadcasting Cos., Inc.   4,000   Ame	Shares		Cost	value	Shares		Cost	value
Management   Man		Finance				General business		
Althorastic Date   174,564   208,650   20,000	11,800	Aetna Life & Cas-			3,200	American Broad-		
A. Co.   91.031   112.375     Processing, Inc.   174.564   208.650   Processing, Inc.   174.650   Processin			\$ 476,709	\$ 550,175	3,	casting Cos., Inc.	\$ 208,432	\$ 364,000
American General Corp.   215,599   258,075   1,400	3,100	, ,	02.021		3,900			. 0.6.
Corp.   156,375   181,088   1,400   Capital Ciries   Communications   240,800   312,550   Corp.   224,4650   Corp.   225,347   243,688   Corp.   225,347   243,688   Corp.   226,347   243,688   Corp.   234,675   Corp.   236,360	7.400		93,031	112,375	2 800		174,504	208,650
Corp.   156,375   181,088   Communications   240,800   312,550	,,,		215,599	258,075	5,000		155,800	190,000
Description	3,300				1,400			
Corp.   336,662   315,563   7,100   Dow Jones & Co.   1,000   Dow Jones & Do	16 600	I .	156,375	181,088	4 100		240,800	312,550
3,100   Bankers Trust N.Y. Corp.   225,347   243,688   7,100   Dow Jones & Co.,   10,	10,500		326,662	315,563	4,200	, , , ,	220.017	244.650
2,700   Barnert Banks of Florida   8,5,850   101,925   7,100   101,925   7,100   101,925   7,100   101,925   7,100   101,925   1,200   101,925   1,200   101,925   1,200   101,925   1,200   101,925   1,200   101,925   1,200   101,925   1,200   101,925   1,200   101,925   1,200   101,925   1,200   101,925   1,200   1,200   101,925   1,200   101,925   1,200   101,925   1,200   101,925   1,200   101,925   1,200	3,500	1	3	3-3-5-5	7,100		-20,01,	244,050
Florida		A.	225,347	243,688				
3,500   Beneficial Corp.   129,788   157,062   6,600   Newspapers. Inc.   234,300   275,125   6,300   CNA Financial   234,675   370,125   1,200   M/A-COM, Inc.   144,478   128,700   85,500   Copp.   6) Delawre   129,509   133,700   2,500   Communication   136,135   195,625   Comm	2,700		86 860	101.026			498,639	575,306
Corp.   Corp	3,500				/,100		234.300	275.125
12,700			<i>,</i> , ,	3,,	6,600			
Corp. of Delaware   129,509   133,700   munications Ltd.   511,387   458,788			234,675	370, 125			80,400	85,500
Store	5,600		120,400	111 500	12,700		6.7.7.20	0 = 0 0
Vork Corp.   203,502   214,500   1,400   Taff Broadcasting   136,135   195,625   2,300   Continental Corp.   137,148   171,062   1,400   Taff Broadcasting   Co.   82,600   105,525   3,000   Continental Illinois   Corp.   2,811   5,250   Shelter	5,200		129,509	133,700	2,500		511,387	450,700
5,500   Continental Corp.   217,093   236,500   Co.   82,600   105,525     3,000   Continental Illinois   Corp.   2,811   5,250   Shelter     3,000   Continental Illinois   Corp.   3,000   2,438   Shelter     5,200   First Chicago   Corp.   122,902   115,700   American Standard, Inc.   \$140,825   \$128,463     4,600   First Interstate   Bancorp   215,625   254,725   American Standard, Inc.   \$140,825   \$128,463     4,400   Great Western   Financial Corp.   119,944   127,600   3,000   Boise Cascade   Corp.   \$127,875   144,750     5,600   Household International Corp.   201,900   205,800   10,200   Champion International Corp.   3,000   Champion International Corp.   201,900   205,800   11,200   Champion International Corp.   206,800   144,437   Corp.   248,727   235,875     4,700   Lincoln National   Corp.   206,800   194,462   Tincoln National Corp.   206,800   194,462   Tincoln National Corp.   228,800   224,438   3,914   Cuisiana Pacific Corp.   410,463   147,437   Corp.   410,462   Tincoln National Corp.   228,800   224,438   3,914   Cuisiana Pacific Corp.   410,463   410,462   Tincoln National Corp.   410,	5,		203,502	214,500	-,,,		136,135	195,625
3,000   Continental Illinois   Corp.   2,811   5,250   Soletter					1,400			
Corp.   2,811   5,250   Shelter		1	217,993	236,500		Co.		105,525
Shelter	3,000		2.811	5,250			\$ 3,018,661	\$ 3,478,119
Holding Corp.   3,000   2,4,48	3,000	Continental Illinois	_,	51-5-		Shelter		
Corp.   122,902   115,700   2,600   Armstrong World   Bancorp   215,625   254,725   1,40,825   128,463   1,40,825   1,44,750   1,40,825   1,40,825   1,40,825   1,44,750   1,40,825   1,44,750   1,4			3,000	2,438				
4,600   First Interstate   Bancorp   215,625   254,725   Industries, Inc.   95,901   101,400	5,200		122.002	116 700	4,300		e 140 826	e 128.462
Bancorp   215,625   254,725   Industries, Inc.   95,901   101,400	4,600	1	122,902	113,700	2,600		J 140,025	9 120,403
Financial Corp. 5,600 Household International Corp. 5,600 Household International Corp. 5,600 Household International Corp. 7,300 InterFirst Corp. 88,762 75,738 tional Corp. 146,463 147,437 Corp. 11200 Georgia Pacific Corp. 146,463 147,437 Corp. 15,700 Manufacturers Hanover Corp. 228,800 224,438 Corp. 10,300 Merrill Lynch & Co., Inc. 10,500 Morgan (J. P.) & Co., Inc. 10,500 Multibank Financial Corp. 150,750 Norwest Corp. 160,500 Trans America Corp. 150,750 Norwest Corp. 161,750 Safeco Corp. 162,750 St. Paul Cos., Inc. 165,537 St. Paul Cos., Inc. 174,538 Safeo Corp. 175,500 Norwest Corp. 188,250 Safeo Corp		1	215,625	254,725		Industries, Inc.	95,901	101,400
5,600 Household International Corp. 201,900 205,800 10,200 Champion International Corp. 81,466 80,600 10,200 Champion International Corp. 248,727 235,875 11,200 Georgia Pacific Corp. 146,463 147,437 Corp. 206,800 194,462 Tries, Inc. 128,911 124,378 11,200 Corp. 206,800 194,462 Tries, Inc. 128,911 124,378 124,	4,400		***	*** 600	3,000			
tional Corp. 201,900 205,800 10,200 Champion International Corp. 248,727 235,875  3,500 Jefferson Pilot Corp. 146,463 147,437 Corp. 292,600 266,000  4,700 Lincoln National Corp. 206,800 194,462 tries, Inc. 128,911 124,378  5,700 Manufacturers Hanover Corp. 228,800 224,438 Corp. 94,050 86,597  2,900 Mellon Bank Corp. 139,413 156,600 4,000 Lowes Cos., Inc. 112,540 107,500  10,300 Merrill Lynch & Corp. 363,075 333,462 1,900 National Gypsum Co. Inc. 480,466 540,750 2,400 Potlatch Corp. 82,224 83,700  4,500 Multibank Financial Corp. 150,750 129,375 2,300 Walter (Jim) Corp. 82,234 83,700  4,100 Safec Corp. 144,525 165,537  2,200 St. Paul Cos., Inc. 126,775 159,500  3,300 Travelers Corp. 213,598 233,600  9,300 Travelers Corp. 377,905 430,125 6,000 USF&G Corp. 188,250 220,500	5.600		119,944	127,600	3.100			
3,500 Jefferson Pilot Corp.	, , , , ,		201,900	205,800	-			
Corp. 146,463 147,437 Corp. 292,600 266,000 Lone Star Industries, Inc. 128,911 124,378 Sorter Hanover Corp. 228,800 224,438 Corp. 4,000 Lowes Cos., Inc. 112,540 107,500 Mellon Bank Corp. 139,413 156,600 4,000 Lowes Cos., Inc. 112,540 107,500 Merrill Lynch & Co., Inc. 363,075 333,462 1,900 National Gypsum Co., Inc. 480,466 540,750 2,400 Potlatch Corp. 82,224 83,700 Multibank Financial Corp. 150,750 129,375 2,300 Walter (Jim) Corp. 82,536 85,387 Norwest Corp. 144,525 165,537 2,200 St. Paul Cos., Inc. 126,775 159,500 TransAmerica Corp. 213,598 233,600 USF&G Corp. 188,250 220,500			88,762	75,738			248,727	235,875
4,700 Lincoln National Corp. 206,800 194,462 5,129 Lone Star Industries, Inc. 128,911 124,378  5,700 Manufacturers Hanover Corp. 228,800 224,438 Corp. 94,050 86,597  2,900 Mellon Bank Corp. 139,413 156,600 4,000 Lowes Cos., Inc. 112,540 107,500  10,300 Merrill Lynch & 6,200 Masco Corp. 202,337 218,550  Co., Inc. 363,075 333,462 1,900 National Gypsum Co. Morgan (J. P.) & Co., Inc. 480,466 540,750 2,400 Potlatch Corp. 82,224 83,700  4,500 Multibank Finan- cial Corp. 150,750 129,375 2,300 Walter (Jim) Corp. 82,536 85,387  3,200 Norwest Corp. 86,032 87,200 14,200 Weyerhaeuser Co. 463,275 408,250  4,100 Safeco Corp. 144,525 165,537  2,200 St. Paul Cos., Inc. 126,775 159,500  3,600 Texas Commercial Bancshares, Inc. 147,636 114,750  Trans America Corp. 213,598 233,600  9,300 Travelers Corp. 188,250 220,500	3,500	•	146 462	147 437	11,200		202 600	266,000
Corp. 206,800 194,462 tries, Inc. 128,911 124,378  5,700 Manufacturers Hanover Corp. 228,800 224,438 Corp. 94,050 86,597  2,900 Mellon Bank Corp. 139,413 156,600 4,000 Lowes Cos., Inc. 112,540 107,500  Merrill Lynch & 6,200 Masco Corp. 202,337 218,550  Co., Inc. 363,075 333,462 1,900 National Gypsum  Co., Inc. 480,466 540,750 2,400 Potlatch Corp. 82,224 83,700  4,500 Multibank Finan- cial Corp. 150,750 129,375 2,300 Walter (Jim) Corp. 82,536 85,387  3,200 Norwest Corp. 86,032 87,200 14,200 Weyerhaeuser Co. 463,275 408,250  4,100 Safeco Corp. 144,525 165,537  2,200 St. Paul Cos., Inc. 126,775 159,500  Trans America Corp. 213,598 233,600  Travelers Corp. 188,250 220,500	4,700	A .	140,403	14/,43/	5,129		292,000	200,000
Hanover Corp. 228,800 224,438 Corp. 94,050 86,597 2,900 Mellon Bank Corp. 139,413 156,600 4,000 Lowes Cos., Inc. 112,540 107,500 10,300 Merrill Lynch & 6,200 Masco Corp. 202,337 218,550 Co., Inc. 363,075 333,462 1,900 National Gypsum Co., Inc. 480,466 540,750 2,400 Potlatch Corp. 82,224 83,700 4,500 Multibank Finan- cial Corp. 150,750 129,375 2,300 Walter (Jim) Corp. 82,536 85,387 3,200 Norwest Corp. 86,032 87,200 14,200 Weyerhaeuser Co. 463,275 408,250 4,100 Safeco Corp. 144,525 165,537 2,200 St. Paul Cos., Inc. 126,775 159,500 3,600 Texas Commercial Bancshares, Inc. 147,636 114,750 7,300 Trans America Corp. 213,598 233,600 9,300 Travelers Corp. 188,250 220,500		1	206,800	194,462		,	128,911	124,378
2,900 Mellon Bank Corp. 139,413 156,600 4,000 Lowes Cos., Inc. 112,540 107,500 6,200 Masco Corp. 202,337 218,550 Co., Inc. 363,075 333,462 1,900 National Gypsum Co. 82,412 88,113 Co., Inc. 480,466 540,750 2,400 Potlatch Corp. 82,224 83,700 Multibank Financial Corp. 150,750 129,375 2,300 Walter (Jim) Corp. 82,536 85,387 3,200 Norwest Corp. 86,032 87,200 14,200 Weyerhaeuser Co. 463,275 408,250 4,100 Safeco Corp. 144,525 165,537 2,200 St. Paul Cos., Inc. 126,775 159,500 Trans America Corp. 213,598 233,600 Possible Corp. 213,598 233,600 USF&G Corp. 188,250 220,500	5,700		0 0		3,914			9.6 .0=
10,300 Merrill Lynch & 6,200 Masco Corp. 202,337 218,550 Co., Inc. 363,075 333,462 1,900 National Gypsum Co. 82,412 88,113 Co., Inc. 480,466 540,750 2,400 Potlatch Corp. 82,224 83,700 Pulte Home Corp. 68,508 55,275 cial Corp. 150,750 129,375 2,300 Walter (Jim) Corp. 82,536 85,387 3,200 Norwest Corp. 86,032 87,200 14,200 Weyerhaeuser Co. 463,275 408,250 4,100 Safeco Corp. 144,525 165,537 2,200 St. Paul Cos., Inc. 126,775 159,500 3,600 Texas Commercial Bancshares, Inc. 147,636 114,750 Trans America Corp. 213,598 233,600 9,300 Travelers Corp. 377,905 430,125 6,000 USF&G Corp. 188,250 220,500	2 000				4.000			
Co. 82,412 88,113 Co., Inc. 480,466 540,750 2,400 Potlatch Corp. 82,224 83,700 4,500 Multibank Finan- cial Corp. 150,750 129,375 2,300 Walter (Jim) Corp. 82,536 85,387 3,200 Norwest Corp. 86,032 87,200 14,200 Weyerhaeuser Co. 463,275 408,250 4,100 Safeco Corp. 144,525 165,537 2,200 St. Paul Cos., Inc. 126,775 159,500 3,600 Texas Commercial Bancshares, Inc. 147,636 114,750 7,300 Trans America Corp. 213,598 233,600 9,300 Travelers Corp. 377,905 430,125 6,000 USF&G Corp. 188,250 220,500			*39,4*3	1,0,000		Masco Corp.		
Co., Inc. 480,466 540,750 2,400 Potlatch Corp. 82,224 83,700 4,500 Multibank Finan- cial Corp. 150,750 129,375 2,300 Walter (Jim) Corp. 82,536 85,387 3,200 Norwest Corp. 86,032 87,200 14,200 Weyerhaeuser Co. 463,275 408,250 4,100 Safeco Corp. 144,525 165,537 2,200 St. Paul Cos., Inc. 126,775 159,500 3,600 Texas Commercial Bancshares, Inc. 147,636 114,750 7,300 Trans America Corp. 213,598 233,600 9,300 Travelers Corp. 188,250 220,500			363,075	333,462	1,900	National Gypsum		
4,500 Multibank Finan- cial Corp. 150,750 129,375 2,300 Walter (Jim) Corp. 82,536 85,387  3,200 Norwest Corp. 86,032 87,200 14,200 Weyerhaeuser Co. 463,275 408,250  4,100 Safeco Corp. 144,525 165,537 2,200 St. Paul Cos., Inc. 126,775 159,500  3,600 Texas Commercial Bancshares, Inc. 147,636 114,750  7,300 Trans America Corp. 213,598 233,600  9,300 Travelers Corp. 377,905 430,125 6,000 USF&G Corp. 188,250 220,500	10,500		190 166	640.560	2 400			
cial Corp. 150,750 129,375 2,300 Walter (Jim) Corp. 82,536 85,387 3,200 Norwest Corp. 86,032 87,200 14,200 Weyerhaeuser Co. 463,275 408,250 4,100 Safeco Corp. 144,525 165,537 2,200 St. Paul Cos., Inc. 126,775 159,500 3,600 Texas Commercial Bancshares, Inc. 147,636 114,750 7,300 TransAmerica Corp. 213,598 233,600 9,300 Travelers Corp. 377,905 430,125 6,000 USF&G Corp. 188,250 220,500	4.500		480,400	540,750				
4,100 Safeco Corp. 144,525 165,537 2,200 St. Paul Cos., Inc. 126,775 159,500 3,600 Texas Commercial Bancshares, Inc. 147,636 114,750 7,300 Trans America Corp. 213,598 233,600 9,300 Travelers Corp. 377,905 430,125 6,000 USF&G Corp. 188,250 220,500	4,700		150,750	129,375				
2,200 St. Paul Cos., Inc. 126,775 159,500  3,600 Texas Commercial Bancshares, Inc. 147,636 114,750  7,300 Trans America Corp. 213,598 233,600  9,300 Travelers Corp. 377,905 430,125 6,000 USF&G Corp. 188,250 220,500					14,200	Weyerhaeuser Co.	463,275	408,250
3,600 Texas Commercial Bancshares, Inc. 147,636 114.750 7,300 Trans America Corp. 213,598 233,600 9,300 Travelers Corp. 377,905 430,125 6,000 USF&G Corp. 188,250 220,500							\$ 2,304,127	\$ 2,214,838
Bancshares, Inc. 147,636 114,750 7,300 Trans America Corp. 213,598 233,600 9,300 Travelers Corp. 377,905 430,125 6,000 USF&G Corp. 188,250 220,500			120, //5	139,500				
Corp. 213,598 233,600 9,300 Travelers Corp. 377,905 430,125 6,000 USF&G Corp. 188,250 220,500	5,	Bancshares, Inc.	147,636	114,750				
9,300 Travelers Corp. 377,905 430,125 6,000 USF&G Corp. 188,250 220,500	7,300							
6,000 USF&G Corp. 188,250 220,500	0.200							

83,250 79,200 \$ 6,471,170 \$ 7,050,025



ı	CI		C	Market	Ct		Cost	Market value
П	Shares		Cost	value	Shares		Cost	value
ı		Technology				Transportation		
ı	6,100	Advanced Micro			2,000	Amsted Industries,		
ı	(	Devices, Inc. American Tele-	\$ 215,849	\$ 158,600	0	Inc. Burlington	\$ 84,060	\$ 79,750
П	113,600	phone & Telegraph			8,100	Northern, Inc.	459,756	505,237
н		Co.	2,413,652	2,740,600	16,400	CSX Corp.	445,014	428,450
п	11,900	AMP, Inc.	440,419	383,775	3,100	Chicago &		
п	6,700	Apple Computer	196,042	120,600		North Western		
ш	3,100	Computervision			0	Transportation	81,475	65,875
и		Corp. Cullinet Software,	135,269	44,175	2,800	Consolidated Freightways, Inc.	0.5.50	99 000
u	3,300	Inc.	90,783	89,512	5,100	Federal Express	95,578	88,900
п	2,700	Data General Corp.	194,427	100,913	3,100	Corp.	184,288	226,313
и	6,400	Digital Equipment	-24,4-7	,,3	3,100	General Signal		, 5-5
п		Corp.	780,064	600,800		Corp.	165,493	142,212
и	4,300	DSC Communica-			4,500	I C Industries	154,732	158,062
		tions Corp.	120,981	88,150	6,900	Norfolk Southern		
	4,900	General Dynamics				Corp.	449,43 I	472,650
и		Corp. General Instrument	369,999	364,437	2,700	Overnite Transportation Co.	00-	0 . = -
и	4,300	Corp.	85,462	68,263	2,000	Paccar, Inc.	84,587 105,520	84,713 82,500
ш	4,800	Gould, Inc.	123,150	120,600	4,400	Roadway Services,	103,320	62,300
и	3,100	Grumman Corp.	89,000	95,325	4,400	Inc.	140,800	127,600
п	12,400	Intel Corp.	393,824	322,400	5,200	Ryder Systems,	, - , -	,,
ш	5,600	Intergraph Corp.	189,728	170,800		Inc.	146,601	148,850
и	7,100	Lockheed Aircraft			19,900	Santa Fe Southern		
н		Corp.	331,109	363,875		Pacific Corp.	570,489	661,675
ш	4,400	McDonnell Doug- las Corp.	229 204	222 950	12,500	Union Pacific Corp.	504.255	506 975
и	5,300	Northrop Corp.	328,394 271,519	333,850 276,262	2,200	Yellow Freight	594,275	596,875
п	3,900	Pitney Bowes, Inc.	168,675	175,013	2,200	Systems, Inc.		
	5,200	Prime Computer,	,-,3	- / 31 3		of Delaware	83,600	84,150
		Inc.	90,350	97,500			\$ 3,845,699	\$ 3,953,812
ш	2,700	Shared Medical					\$ 3,043,099	\$ 3,953,612
ш		System	84,739	78,975				
и	4,500	Tandem Com-	- 0 -	0 (-				
ш	2.700	puters, Inc. Texas Instruments,	110,857	81,562				
Ш	2,700	Inc.	342,687	258,188				
Ш	3,700	Textron, Inc.	146,913	203,500				
1	15,300	Wang Labs, Inc.	424,728	275,400				
	3,400	Zenith Electronics						
		Corp.	80,784	67,575				
			\$ 8,219,404	\$ 7,680,650				
			,,,,,,,,,,	,,,				

darket value

64,000 08,650 9**0**,000

12,550

44,650 133,700 175,306

275,125 128,700 85,500

458,788 195,625

105,525 478,119

128,463 101,400

144.750 80,600

235,875 266,000 124,378

86,597 107,500 218,550

88,113 83,700 55,275 85,387 408,250

,214,838

## Schedule of investments, continued

			Market				Market
Shares		Cost	value	Shares		Cost	value
	Utilities				Miscellaneous		
20,500	American Electric Power, Inc.			7,700	Gulf & Western Industries, Inc.	2.6.5	
10,900	Ameritech	\$ 431,125 873,006	\$ 484,312 1,034,138	4,600	Litton Industries,	\$ 246,477	\$ 300,300
4,300	Baltimore Gas & Electric Co.	170,431	199,950	371	Inc. Northwest Indus-	325,750	378,350
11,100	Bell Atlantic Corp. Bellsouth Corp.	909,803	1,028,138	1,300	tries, Inc. Teledyne, Inc.	19,709	19,060
10,200	Central & South	1,184,141		1,300	releasine, inc.	\$ 929,936	334,588 \$ 1,032,298
4,300	West Corp. Columbia Gas	228,863	263,925		Total equity		· -,-j-,-
20,500	Systems, Inc. Commonwealth	142,375	137,600		investments	\$75,834,519	\$81,311,590
	Edison Co. Consolidated Edi-	566,367	632,937				
14,300	son Co. of						
4,500	New York Consolidated	425,568	530,887				
15,200	National Gas Co. Detroit Edison Co.	188,137 233,700	196,313				
9,500	Dominion	255,700	200,300				
	Resources, Inc. of Virginia	271,163	313,500				
I1,100	Duke Power Co.	331,750	385,725				
12,800	FPL Group, Inc.	287,042	328,000				
22,500	GTE Corp.	967,725	908,438				
4,800 26,000	Internorth, Inc. MCI Communica-	204,850	211,200				
20,500	tions Corp. Middle South	260,260	282,750				
	Utilities, Inc.	284,437	294,687				
12,700	Niagara Mohawk Power Corp.	225,425	257,175				
3,400	Northern States		- ( - 9				
	Power Co.	145,175	167,875				
11,100	NYNEX Corp.	863,136	990,675				
13,200	Ohio Edison Co. Pacific Gas &:	188,037	202,950				
	Electric Co.	593,337	686,875				
4,200	Pacific Lighting Corp.	165,525	192,150				
10,900	Pacific Telesis Group	761,747	854,288				
4,800	Panhandle Eastern Corp.	186,648	174,000				
5,100	Peoples Energy Corp.	81,651	86,700				
17,600	Philadelphia	, ,					
10,000	Electric Co. Public Service	278,812	270,600				
13,200	Indiana Co., Inc. Public Service	82,500	83,750				
	Electric & Gas Co. Southern California	344.730	402,600				
23,300	Edison Co.	527,395	623,275				
28,100	Southern Co.	524,673	621,712				
10,900	Southwestern Bell Corp.	787,634	915,600				
14 800	Texas Utilities Co.	400,210	458,800				
14,800	U.S. West, Inc.	763,306	858,600				
10,000	O.S. West, IIIC.	\$14,880,684	\$16,726,525				



Principal			Market
amount	Fixed income investments	Cost	value
	Corporate and municipal obligations		
\$ 5,000	Alabama Power Co.		
	1st 4.375%, 5/1/1993	\$ 3,298	\$ 3,352
15,000	Allied Corp.	11.021	11 619
290,000	deb. 5.20%, 11/1/1991 American Telephone & Telegraph	11,031	11,648
	deb. with rates ranging from 4.75% to 8.75% and		
	maturities ranging from 1/1/1997 to 4/1/2001	170,654	190,231
50,000	American Telephone & Telegraph notes 10.375%, 6/1/1990	50,529	50,813
230,000	Amoco	30,329	50,015
	s.f. deb. with rates ranging from 6.0% to 9.20% and		
10,000	maturities ranging from 1/15/1998 to 8/1/2007 Atchison Topeka & Santa Fe Railroad	164,406	182,077
10,000	gen. 4.0%, 10/1/1995	5,712	5,762
30,000	Bell Telephone Co. of Pennsylvania		
	deb. 4.75%, 5/1/2001	14,711	16,224
25,000	Boston Edison Co. 1st 8.125%, 5/15/2001	19,494	18,833
30,000	Boston Gas Co.	- 2, 424	,-55
	1st 4.65%, 5/1/1990	21,002	24,305
40,000	Brooklyn Union Gas Co.  1st 4.625%, 4/1/1990	28,345	31,019
70,000	Carolina Power & Light Co.	20,343	31,019
	1st with rates ranging from 4.50% to 8.75% and		
2 000	maturities ranging from 7/1/1994 to 8/1/2000 Chesapeake & Ohio Railroad Co.	50,489	53,209
3,000	2nd inc. 4.0%, 1/1/1989	2,160	2,168
70,000	Chesapeake & Potomac Telephone Co. Md.	_,	_,
	deb. with rates ranging from 3.25% to 9.0% and		0.0.0
15,000	maturities ranging from 2/1/1995 to 10/1/2018 Chesapeake & Potomac Telephone Co. Va.	49,706	50,888
13,000	deb. 5.625%, 3/1/2007	8,462	8,429
190,000	Chevron Corp.		
100,000	s.f. deb. 8.75%, 7/1/2005 Citicorp	140,357	153,900
100,000	notes 8.45%, 3/15/2007	65,774	76,453
20,000	Cleveland Electric Illuminating Co.	2	, ,,,,,,
****	1st 7.125%, 1/15/1990 Commonwealth Edison Co.	17,075	17,475
115,000	1st with rates ranging from 7.625% to 9.125% and		
	maturities ranging from 6/1/2003 to 10/15/2008	82,417	85,413
40,000	Consolidated Edison Co. of New York		
	1st ref. with rates ranging from 4.625% to 5.90% and maturities ranging from 6/1/1990 to 12/15/1996	28,352	30,398
10,000	Dallas Power & Light Co.	20,332	30,390
	1st 4.25%, 2/1/1993	6,908	6,991
110,000	Duke Power Co.  1st and ref. with rates ranging from 7.0% to 8.125%		
	and maturities ranging from 2/1/1999 to 11/1/2003	78,844	81,062
1,000,000	Export Development Corp.		
340.000	notes 14.375%, 7/15/1987 Exxon Corp.	1,038,200	1,091,690
240,000	deb. with rates ranging from 6.0% to 6.50% and		
	maturities ranging from 11/1/1997 to 7/15/1998	146,860	169,450
15,000	Firestone Tire & Rubber Co.		
15,000	deb. 4.25%, 7/1/1988 Florida Power & Light Co.	11,510	12,910
- 3,	1st 4.625%, 4/1/1994	10,308	10,436
40,000	Ford Motor Co.	0-	
20,000	deb. 9.25%, 7/15/1994 General Electric Co.	32,781	36,369
20,000	deb. 5.30% 5/1/1992	13,600	15,589
100,000	General Electric Credit Corp.		
150,000	deb. 5.50%, 11/1/2001 General Motors Acceptance Corp.	51,841	58,741
130,000	deb. with rates ranging from 9.40% to 12.0% and		
	maturities ranging from 7/15/2004 to 2/1/2005	124,068	138,607

Aarket Value

00,300 78,350

19,060 34,588 32,298

11,590

## Schedule of investments, continued

Principal amount		Cost	Market value
	Corporate and municipal obligations		
\$ 50,000	General Motors Acceptance Corp.		
25,000		\$ 49,118	\$ 50,000
	1st with rates ranging from 4.50% to 7.125% and maturities ranging from 3/1/1995 to 12/1/1998	16,745	16,770
10,000	Georgia Power Co. 1st 4.375%, 11/1/1992	6,861	6,943
1,600,000		1,600,000	1,600,000
35,000	Gulf Oil Corp.	1,000,000	1,000,000
	deb. with rates ranging from 5.35% to 6.625%, and maturities ranging from 6/15/1991 to 6/15/1993	37.003	28,264
50,000		27,092	20,204
16.000	1st 7.75%, 3/1/1999 Gulf States Utilities	35,226	37,230
35,000	1st with rates ranging from 4.0% to 7.875%, and		
210,000	maturities ranging from 5/1/1988 to 12/1/2000 Houston Lighting & Power Co.	25,879	26,774
	1st with rates ranging from 5.25% to 10.125% and		
30,000	maturities ranging from 4/1/1996 to 9/1/2004 Idaho Power Co.	145,777	157,988
	1st 4.50%, 11/1/1991	19,789	22,053
105,000	Illinois Bell Telephone Co.  1st with rates ranging from 4.375% to 8.0% and		
	maturities ranging from 3/1/1994 to 4/1/2006	71,220	76,565
60,000	Illinois Power Co. 1st 10.50%, 9/1/2004	49,954	53,711
50,000	Indianapolis Power & Light Co.	491934	23,711
	1st with rates ranging from 5.125% to 5.625% and maturities ranging from 4/1/1996 to 5/1/1997	29,562	32,637
50,000	International Bank for Reconstruction &	7.3	3 , 3,
	Development 8.35%, 8/1/2002	40, 194	40,537
200,000	International Business Machines		
100,000	deb. 9.375%, 10/1/2004 Irving Bank Corp.	163,728	182,000
	s.f. deb. 12.375%, 11/15/2007	92,669	103,292
30,000	McGraw Edison Co. deb. 7.50%, 5/1/1996	20,762	23,365
55,000	Michigan Bell Telephone Co.		
	deb. with rates ranging from 4.75% to 6.375% and maturities ranging from 11/1/1992 to 2/1/2005	33,579	36,458
75,000	Minnesota Power & Light Co.		
15,000	1st 8.35%, 9/1/2007 Mississippi Power & Light Co.	58,347	56,890
	1st 4.625%, 3/1/1995	8,807	8,924
50,000	Mobil Corp. deb. 8.50%, 6/15/2001	36,536	40,313
20,000	Mountain States Telephone & Telegraph Co. deb. 4.50%, 6/1/2002	8,625	10,445
300,000		6,023	10,443
50,000	GIC 12.30%, 11/18/1986 National Steel Corp.	300,000	300,000
30,000	1st 8.375%, 8/1/2006	29,779	32,587
35,000	New England Power Co. 1st 7.125%, 7/1/1998	23,236	26 267
145,000		23,230	25,257
	deb. with rates ranging from 4.0% to 8.20% and maturities ranging from 4/1/1993 to 7/1/2005	72,388	81,055
138,000	New Jersey Bell Telephone Co.	/2,300	01,033
	deb. with rates ranging from 3.0% to 5.875% and maturities ranging from 5/1/1989 to 12/1/2006	69,629	75 271
12,000	New York State Electric & Gas Corp.	09,029	75,371
50,000	1st 4.625%, 5/1/1987 New York Telephone Co.	10,948	11,014
30,000	1st & ref. with rates ranging from 4.625% to 7.50%		
	and maturities ranging from 1/1/2002 to 3/1/2009	26,590	28,282



Principal imount		Cost	Market value
	Corporate and municipal obligations		
75,000	Niagara Mohawk Power Corp.		
50,000	1st 8.35%, 8/1/2007 Northern Indiana Public Service Co.	\$ 53,910	\$ 55,267
	1st 8.125%, 5/1/2001	35,126	37,677
6,000	Northern Pacific Railroad Co. pr. lien 4.0%, 1/1/1997	3,570	4,380
240,000	Northern States Power Co. Minnesota	3,7,0	4,500
	with rates ranging from 5.0% to 6.75% and maturities ranging from 12/1/1990 to 5/1/1998	170,277	192,886
145,000	Northwestern Bell Telephone Co.	, , , ,	,
	deb. with rates ranging from 4.875% to 9.50% and maturities ranging from 6/1/1998 to 8/15/2016	105,690	108,872
I 2,000	Ohio Power Co.	77.06.	
100,000	1st 4.25%, 11/1/1986 Oklahoma Gas & Electric Co.	11,064	11,131
	1st with rates ranging from 8.375% to 9.125% and	0	0
1,950,000	maturities ranging from 1/1/2004 to 1/1/2005 Ontario Province, Canada	73,558	80,071
	notes 14.625%, 8/31/1992	2,118,734	2,343,003
120,000	Pacific Gas & Electric  1st & ref. with rates ranging from 4.50% to 7.50%		
0	and maturities ranging from 6/1/1992 to 6/1/2004	77,176	82,129
85,000	Pacific Northwest Bell Telephone Co. deb. with rates ranging from 4.50% to 10.125% and		
	maturities ranging from 4/1/2003 to 10/1/2019	64,079	64,359
205,000	Pacific Telephone & Telegraph  deb. with rates ranging from 4.375% to 9.625% and		
	maturities ranging from 8/15/1988 to 11/1/2014	156,199	165,896
100,000	Penney (J. C.) Inc. deb. 6.0%, 5/1/2006	51,571	57,998
30,000	Potomac Electric Power Co.		
75,000	1st 4.375%, 2/15/1998 Public Service Co. of Colorado	15,484	17,020
737	1st with rates ranging from 6.75% to 9.25% and		
10,000	maturities ranging from 7/1/1998 to 10/1/2008 Public Service Electric & Gas Co.	59,566	58,417
	1st & ref. 4.625%, 8/1/1988	8,632	8,696
75,000	Rochester Gas & Electric  1st 8.375% CC, 9/15/2007	54,921	53,609
20,000	Savannah Electric & Power Co.		
4,579,223	1st 4.625%, 4/1/1994 Sears Mortgage Securities Corp.	11,561	13,082
1,3,7,	mtg. pass thru cert. with rates ranging from 11.125%		
	to 11.75% and maturities ranging from 4/25/1993 to 2/25/1996	4,391,847	4,614,620
50,000	Sears Roebuck Acceptance Corp.		
20,000	sub. deb. 8.375%, 12/31/1986 Shell Oil Co.	46,433	49,363
	deb. 5.30%, 3/15/1992	13,631	15,523
30,000	Southern Bell Telephone & Telegraph deb. 4.375%, 4/1/2001	13,686	15,414
290,000	Southern California Edison Co.	•	
	1st & ref. with rates ranging from 4.25% to 8.875% and maturities ranging from 5/1/1987 to 7/1/2002	220,561	235,023
65,000	Southern New England Telephone Co.	, ,	557 5
	deb. with rates ranging from 4.125% to 5.75% and maturities ranging from 3/1/1991 to 12/1/2001	42,764	44,967
250,000	State Mutual Life Insurance Co.		
15,000	GIC 12.50%, 11/19/1985 Sun Oil Co.	250,000	250,000
	deb. 4.625%, 11/15/1990	10,800	12,571
50,000	Sweden (Kingdom of) notes 10.625%, 6/15/1990	46,666	51,005
195,000	Texaco, Inc.	• /	3 . 3
	deb. with rates ranging from 5.75% to 8.875% and maturities ranging from 7/15/1997 to 5/1/2005	140,302	153,555
240,000	Texas Power & Light Co.	, , ,	
	1st with rates ranging from 4.50% to 9.375% and maturities ranging from 1/1/1991 to 2/1/2009	169,347	180,630
I /	,,	7,34/	200,000

Market value

50,000

16,770 6,943 500,000

28,264 37,230

26,774

157,988 22,053

76,565

32,637

40,537 182,000 103,291 23,360

36,458 56,890 8,924 40,313 10,44) 300,000 32,587 25,257

81,055

75,371 [],014

28,282

## Schedule of investments, continued

Principal amount		Cost	Market value
	Corporate and municipal obligations		
\$ 20,000	Union Carbide Corp.		
60,000	s.f. deb 5.30%, 3/1/1997 Union Carbide Corp.	\$ 12,966	\$ 13,598
00,000	notes 9.125%, 8/15/1986	57,139	59,733
540,000	Unocal Corp. sr. sec. notes with rates ranging from 1.0% to 14.0%		
71,000	and maturities ranging from 5/15/1990 to 5/15/1997 Virginia Electric & Power Co.	562,425	563,925
100,000	1st & ref. with rates ranging from 4.875% to 11.0% and maturities ranging from 6/1/1991 to 7/1/1994 West Pennsylvania Power Co.	65,474	65,012
100,000	1st 9.25%, 11/1/2004	77,778	83,685
19,000	Western Electric Co. s.f. deb. 8.375%, 10/1/1995	14,866	16,608
15,000	Weyerhauser Co.	14,800	10,000
	s.f. deb. 5.20%, 5/1/1991	12,968	13,670
25,000	Wisconsin Electric Power Co. 1st 7.25%, 5/15/1999	18,532	18,335
35,000	Wisconsin Telephone Co.	.55	,,,,,
40,000	deb. with rates ranging from 4.50% to 7.25% and maturities ranging from 7/1/1992 to 2/1/2007  Xerox Corp.	23,822	24,474
, ,	s.f. deb. 8.625%, 11/1/1999	29,779	32,976
		\$ 14,814,838	\$ 15,668,347
	U.S. government agency and Treasury obligations		
\$ 251,963	Farmers Home Administration Insured		
29,600,000	notes 9.875%, 9/19/1989 Federal Farm Credit Banks with rates ranging from 7.75% to 14.30% and	\$ 250,994	\$ 250,994
112,700,000	maturities ranging from 12/2/1985 to 10/20/1993 Federal Home Loan Banks	28,298,019	31,481,692
100,000	with rates ranging from 9.20% to 13.85% and maturities ranging from 1/27/1986 to 12/27/1993 Federal Land Banks	107,183,078	119,633,185
	8.20%, 1/22/1990	86,187	94,875
5,100,000	Federal National Mortgage Assoc. with rates ranging from 11.60% to 12.0% and maturities ranging from 2/10/1989 to 3/11/1991	4,939,250	5,363,075
73,516,452	Government National Mortgage Assoc. with rates ranging from 9.25% to 15.0% and maturities ranging from 6/15/2009 to 10/15/2019	64,456,381	72 047 086
1,453,000	Private Export Funding Corp. with rates ranging from 14.125% to 16.20% and	04,430,301	72,047,986
125,212	maturities ranging from 9/30/1989 to 6/1/1991 Small Business Administration	1,553,025	
25,000,000	9.875%, 1/27/1993 Student Loan Funding Corp.	125,212	125,212
	11.70%, 7/5/1988	24,312,500	26,445,248
2,000,000	United States Treasury Bonds 9.0%, 2/15/1994	1,639,999	1,868,740
16,825,000	United States Treasury Notes		
	with rates ranging from 7.875% to 13.0% and maturities ranging from 5/15/1986 to 8/15/1993	15,538,167	16,958,023
			\$275,882,121
	Total fixed income investments		\$291,550,468
	Total media mirestinents	=	2391,330,400
	Total money market investments	\$185,261,939	\$185,261,939
	Total investments	\$524,294,108	\$558,123,997

### Members of the PRIM Board

he members of the Pension eserves Investment Mangement Board consist of cignated representatives of the governor and the state easurer, as well as elected ad appointed representatives of state, county and numcipal employees. By who one member must be a rivate citizen experienced the field of investment or nancial management one nust be a member of a particular particular retirement board, wo must be representatives femployee organizations, wo must be elected by state inployees and teachers, and ne must be the Commister of Public Employee etirement Administration, lembers serve without



T. Dustin Alward, appointed by the Governor, is President of the Professional Firefighters Association of Massachusetts, AFL-CIO. Term expires 3/30/87.



Joseph Bonavita, appointed by the State Treasurer, is Executive Director of the American Federation of State, County and Municipal Employees, Council 93, AFL-CIO. Term expires 4/27/88.



Robert Q. Crane, Chairman, is the Treasurer of the Commonwealth of Massachusetts. Ex-officio member.



George E. Filion, elected by the members of the State Teachers' Retirement System, is a retired public school teacher and administrator from Salem, Massachusetts. Term expires 7/20/87.



Arthur J. Gutierrez, appointed by the State Treasurer, is President of The Gutierrez Company, a real estate development firm, located in Burlington, Massachusetts. Initially appointed to a one-year term, he was reappointed. Term expires 6/25/89.



John J. McGlynn, Vice Chairman, is the Commissioner of the Division of Public Employee Retirement Administration. Ex-officio member.



B.J. Rudman, a designee of the Governor, is Assistant Secretary for Management, Executive Office for Administration and Finance. Ex-officio member.



Ralph W. White, elected by the members of the State Retirement System, is President of the Retired State, County and Municipal Employees Association of Massachusetts. Term expires 7/20/87.

23,997 trently Enfilled

31,692

3,18j 94,87<u>!</u>

53,07

47,986

13,091

45,248 68,740

82,121 50,468

61,939

Organization and management

The PRIM Board's offices are located at Two Center Plaza, Boston. The staff is comprised of professionals and support personnel with qualifications in the fields of finance, modern portfolio management, law, business administration, accounting, and retirement board administration. Each member of the senior staff is responsible for a component of the overall agency operation.

Paul E. Quirk Executive Director

Joseph I. Martin Deputy Director/General Counsel

Sandra Clark Whiston Director of Financial Operations

Philip D. Kett Chief Investment Officer

Daniel J. Kelly Director of Program Development

Paul Todisco Staff Analyst

Maureen Duval Administrative Assistant

Patricia Murphy Secretary

Pension Reserves Investment Management Board

Two Center Plaza Boston Massachusetts 02108 Level and manufactures

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Independent of the deputition of the American Archery of & Co. Boston

Modernic Street Birkand Trust-Company Boston



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Annual report for the year ended June 30, 1986

PENSION

RESERVES

**INVESTMENT** 

TRUST

F U N D

The Pension Reserves
Investment Management
(PRIM) Board's mission is to
prudently invest the assets
of participating retirement
systems using professional
fund management techniques in order to reduce
and ultimately eliminate
unfunded pension liabilities,
thereby preserving the
retirement benefits of all
public employees. Some of
the members of participating systems are pictured in
this report.

## **Statement by Chairman and Executive Director**



Overview

June 30, 1986 marks the end of the Pension Reserves Investment Management Board's second year of operation. These first two years have been a period of tremendous growth and change for the agency. What began as an experiment in innovative pension fund management has become, with the active support of the State Legislature and Executive branch, the confidence of our member systems, and the dedication of the Board and staff, a Massachusetts success story. The Pension Reserves Investment Trust (PRIT) Fund's asset base currently exceeds \$1.3 billion and is broadly diversified across all of the major asset classes. This asset allocation plan is designed to maximize investment return while maintaining manageable levels of risk.

In this, the PRIT Fund's second annual report, we will outline our accomplishments during fiscal 1986 and preview our goals for the coming year.



Paul F. Quirk



Robert Q. Crane



Par

All public employees are concerned about the financial health of their retirement systems.

PRIT's asset allocation plan is designed to meet future funding needs.



# Participating systems

When operations began in October, 1984, the Fund's roster of participants numbered only two: the Weymouth Retirement System and the Pension Reserve Fund of the State Employees' and State Teachers' Systems. Since then, that list has grown considerably.

During fiscal 1986, five retirement systems joined the PRIT Fund: Minuteman Regional Vocational Technical School District, Needham, Norfolk County, Shrewsbury and Wakefield. As our third fiscal year begins, four additional systems, Fairhaven, Milton, Montague and Saugus, have become full participants in the Fund. An additional system, Hingham, has purchased shares in the Fund.

All of these participants share a common goal: to maximize investment performance in order to control, reduce and ultimately eliminate their unfunded pension liabilities.

The Pension Reserves Investment Trust Fund's participants share more than just this common goal, they also share in the rate of return earned by the Fund. (Each system's return will vary somewhat depending on the size of their asset base, the date of transfer and ongoing cash flow.) During fiscal 1986, the Fund's overall rate of return, net of all expenses, was 27.17%.

Participating systems also share in an annual State appropriation. This money, pro-rated among PRIT Fund participants, is credited to each participant's pension reserve fund and is intended to defray their future unfunded liability. Since this particular revenue stream is not considered to be pure earnings, such monies are not factored into the Fund's performance reports. When these monies are factored in, the overall cumulative returns for Fund participants range from 29% to 48% since inception.



to the development of a
state-of-the-art portfolio. To enhance
returns and manage
risk, the Fund has
investments in equities,
fixed income, real
estate and venture
capital.

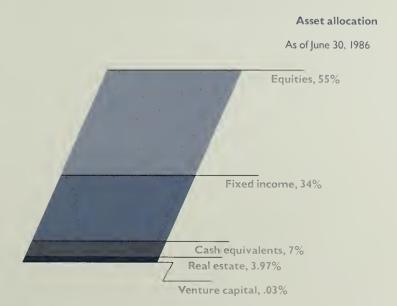


Scope of services

Nineteen fully discretionary investment advisors managed portfolios for the Board during fiscal 1986. These portfolios include indexed and active equities and fixed income, real estate and venture capital investments. Many of these investments are beyond the scope of the smaller institutional investor because of cost considerations as well as the constraints on broad diversification imposed by fund size.

Local systems also benefit from a wide range of expert financial services. The Board has retained the services of Wilshire Associates, a national leader in the field of public pension funds, as fund consultant. State Street Bank and Trust is the PRIT Fund's investment custodian and provides both portfolio accounting and performance evaluation services. Arthur Andersen & Co. serves as the Fund's external auditor.

What does this mean in real terms? It means that the contributory retirement systems of Needham, Weymouth and Shrewsbury have met or exceeded their funding contributions as set out by the most recent State actuarial valuations, and that the economic health of all participating communities is far better now than it was before they joined the Fund.





The PRIM Board has adopted an aggressive investment strategy in order to reduce the unfunded liabilities which threaten the retirement of all public employees.



Track record

The establishment of a performance history or 'track record' is an ongoing process that requires thoughtful planning, strong management and the passage of time to develop. The PRIT Fund's initial participants all made the decision to join without benefit of such a track record. Instead, their decision was based on the recognition of the problem of their unfunded liabilities and the confidence that the PRIM Board's advanced methods of portfolio management could reduce that liability through improved investment performance. That confidence has been rewarded as the Fund's performance has continued to match or exceed market indices over time. Its time-weighted rate of return for the first full calendar year of operation (1985) was 22.79%. For the cumulative period January I, 1985 through June 30, 1986, the PRIT Fund's performance totalled 41.91%. These figures represent pure investment return, net of expenses, and do not include state appropriations.

More importantly, the PRIM Board publicly reports the Fund's investment performance on a monthly basis, comparing it to the major market indices, thereby inviting comparison with other public pension funds.

These return calculations, prepared by the Fund's investment custodian, State Street Bank, enable the Board to constantly monitor and evaluate the performance of its investment advisors and staff, as well as the success of the asset allocation strategy.

This aggressive investment strategy never loses sight of the Fund's ultimate mission: the elimination of unfunded pension liabilities to ensure the financial security of those who have dedicated their working lives to public service.



As participants in the
PRIT Fund, local systems
share in an annual State
appropriation to be
used to defray future
unfunded liabilities,
thus easing the financial
burdens on local
governments.



Program development

At the conclusion of the Fund's first fiscal year, the process of portfolio restructuring was well underway. An equity index fund had been established and active equity managers, of varying but complimentary styles, had been hired.

The search for external bond managers had also commenced. Active bond managers and a bond index fund manager were hired, with allocations made and funded as of September 1, 1985.

Having completed the initial phase of restructuring the equity and fixed income portfolios, attention then focused on the two remaining asset classes: venture capital and real estate. Both are essential to the overall portfolio and provide further diversification, thereby reducing risk, hedging inflation, and enhancing the Fund's return profile.

During fiscal 1986, the Board made allocations totalling \$135 million to nine real estate advisors with expertise in different sectors of the institutional real estate market. By the end of the fiscal year, 35% of these commitments had actually been funded with further commitments and draw downs anticipated to occur on an ongoing basis.

The Massachusetts Housing Program, a joint venture of the PRIT Fund and the two State retirement systems (State Employees' and State Teachers') had been developed. This innovative program, designed to stimulate the construction of multi-family rental housing in the Commonwealth at a market rate of return for the Fund is one of the first of its kind in the country. It is anticipated that the initial funding level of \$50 million will result in the construction of up to 1200 new units of rental housing essential to the continued growth of Massachusetts' strong economic climate.



vide PRIT Fund participants access to a broad array of professional investment managers and modern portfolio management techniques not generally available to smaller funds.



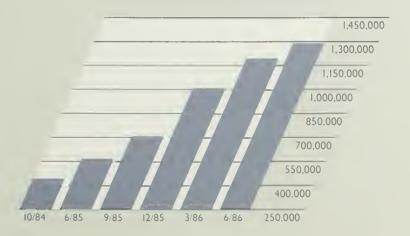
Similarly, a number of venture capital or alternative investment possibilities were reviewed. These ranged from leveraged buyouts (LBO's) to investment in medical technology, fibre optics, data processing, electronics and service industries. As of June 30, 1986, five such firms had been engaged with allocations totalling \$41 million of which 12% or \$4.775 million had actually been funded.

As the Fund continues to grow in size and reputation, the search for new and innovative investment opportunities in all four asset classes remains a priority. In all cases, such selections are only made after careful due diligence by both the staff and fund consultant and a detailed review by the Board meeting in open session.

Growth in assets

Since inception

Dollars in thousands





By choosing to participate in the PRIT Fund local systems have taken an important step toward providing financial security to those nearing retirement.

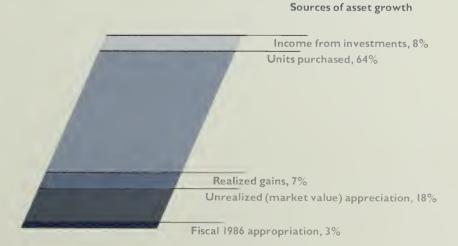


## International investment

Highly sophisticated computer and telecommunications networks have created access to investment opportunities in the international market-place that the intelligent investor can no longer afford to ignore.

In recognition of this reality, the Board funded six international investment advisors after the close of the fiscal year (five active managers, one index fund manager) to manage non-U.S. equity portfolios. This action was taken subsequent to a lengthy educational process during which the Board reviewed the merits of diversifying the portfolio internationally. Candidates were carefully screened and interviewed by the Board, staff, and fund consultant. Chief among the reasons for moving into foreign markets were the enhancement of the portfolio's return profile and a lessening of its overall volatility (risk).

In the final analysis, the Board determined that only by exploring all of the available opportunities and aggressively seeking out innovative investment techniques could the Fund's ultimate mission be accomplished.





In o

Over 147,000 public employees are represented in the PRIT Fund by virtue of their membership in participating systems.



In conclusion

We appreciate the confidence and support demonstrated by those retirement systems that have voluntarily chosen to participate in the PRIT Fund. We also wish to thank the members of both branches of the Massachusetts Legislature and the Executive branch of the Commonwealth whose financial support and commitment to resolving the unfunded liability crisis has resulted in the Fund's success.

We are confident that the asset allocation strategy and investment decisions made to date will encourage additional retirement systems to seriously review the many positive aspects of participation in the Fund.

Robert Q. Crane, Treasurer

Tank F. Suib

Paul F. Quirk, Executive Director



Public employees have a right to expect accountability from those who manage their retirement assets. The PRIM
Board publicly reports on the performance of the PRIT Fund on a monthly basis.

Pension Reserves Investment Trust Fund

Financial statements as of June 30, 1986 and June 30, 1985

#### **Balance** sheet

June 30

Assets

Investments at market value (cost of \$1,132,171,362 and \$524,544,108 at

June 30, 1986 and 1985, see Schedule of investments and Note 2):

Equities

U.S. Government agency and Treasury obligations

Fixed income investments

Money market investments

Real estate

Venture capital investments

Total investments

Cash

Dividend and interest income receivable (Note 2)

Receivable for investments sold

Other assets

**Total assets** 

Liabilities

Management fees payable (Note 3)

Payable for investments purchased

Other liabilities

Total liabilities

Commitments and

See Note 5

contingencies

Net assets

Fund units (1,082,732,373 and 530,250,521 capital fund units outstanding at June 30, 1986 and 1985 and 13,246,641 cash fund units outstanding at June

\$13

\$ 3.2

\$13.2

30, 1986) (Notes I and 2)

Net unrealized gain on investments

**Total net assets** (equivalent to \$1.20 and \$1.07 per capital fund unit based on 1,082,732,373 and 530,250,521 units outstanding at June 30, 1986 and 1985 and \$1.00 per cash fund unit based on 13,246,641 units outstanding at

June 30, 1986)

The accompanying notes are an integral part of these financial statements.

1	0			
1			1986	1985
1	Cash Fund	Capital Fund	Total	Total
ı				
1	\$ —	\$ 718,426,064	\$ 718,426,064	\$ 81,311,590
1	_	330,732,855	330,732,855	275,882,121
ı		104,638,668	104,638,668	15,974,236
ı	13,192,951	76,872,807	90,065,758	185,261,939
ı	_	50,632,065	50,632,065	_
ı	_	4,775,000	4,775,000	_
١	\$13,192,951	\$1,286,077,459	\$1,299,270,410	\$558,429,886
J	_	7,068	7,068	188,044
1	53,690	11,783,682	11,837,372	8,925,935
ı	_	26,148,718	26,148,718	_
ı	_		_	73,641
١	\$13,246,641	\$1,324,016,927	\$1,337,263,568	\$567,617,506
	\$ —	\$ 79,170	\$ 79,170	\$ 100,000
ı	_	27,053,102	27,053,102	271,519
ı	_	_	_	451,798
	<u>\$</u>	\$ 27,132,272	\$ 27,132,272	\$ 823,317
at				
e				
ı	\$13,246,641	\$1,129,785,607	\$1,143,032,248	\$532,964,303
1		167,099,048	167,099,048	33,829,886
ed				
}				
at				
	\$13,246,641	\$1,296,884,655	\$1,310,131,296	\$566,794,189

#### Statement of operations

For the year ended June 30, 1986 and for the period from October 1, 1984 to June 30, 1985

5

5

\$1

\$1.

Investment incline

Interest

Dividends

Total investment income

Less: Management fees (Note 3)

Net investment income

Realized and

Realized gain on investments

unrealized gain on

Increase in unrealized gain on investments

investments

Net gain on investments

State appropriations See Note I

Increase in net

**Total** 

assets resulting from operations

> The accompanying notes are an integral part of these financial statements. October 1, 1984 represents commencement of operations.

		1986	1985
Cash Fund	Capital Fund	Total	Total
\$1,274,697	\$ 44,413,699	\$ 45,688,396	\$ 36,216,205
\ _	17,584,245	17,584,245	1,421,123
\$1,274,697	\$ 61,997,944	\$ 63,272,641	\$ 37,637,328
_	3,371,089	3,371,089	747,965
\$1,274,697	\$ 58,626,855	\$ 59,901,552	\$ 36,889,363
\$ —	\$ 49,472,345	\$ 49,472,345	\$ 12,173,986
_	133,269,161	133,269,161	33,829,886
\$ —	\$182,741,506	\$182,741,506	\$ 46,003,872
\$ —	\$ 21,500,000	\$ 21,500,000	\$ 17,700,000
\$1,274,697	\$262,868,361	\$264,143,058	\$100,593,235

## Statement of changes in net assets

For the year ended June 30, 1986 and for the period from October 1, 1984 to June 30, 1985.

From operations	Net investment income
	Realized gain on investments
	Increase in unrealized gain on investments
	State appropriations (Note I)
	Increase in net assets resulting from operations
Distributions to	Net investment income
member systems	Realized gain on investments
from	State appropriations
	Total distributions to member systems
From fund unit	Proceeds from original unit sales
transactions	Proceeds from subsequent unit sales
	Net asset value of units issued to member systems in reinvestment of net
	investment income, realized gain and state appropriations
	Cost of units repurchased
	Interfund transfers
	Increase in net assets derived from fund unit transactions
Net assets	Total increase in net assets
	Beginning of period

The accompanying notes are an integral part of these financial statements.

October 1, 1984 represents commencement of operations.

١				
ı			1986	1985
ı	Cash Fund	Capital Fund	Total	Total
1	\$ 1,274,697	\$ 58,626,855	\$ 59,901,552	\$ 36,889,363
ı	_	49,472,345	49,472,345	12,173,986
١	_	133,269,161	133,269,161	33,829,886
ı	\$ 1,274,697	\$ 241,368,361	\$ 242,643,058	\$ 82,893,235
ı	_	21,500,000	21,500,000	17,700,000
l	\$ 1,274,697	\$ 262,868,361	\$ 264,143,058	\$100,593,235
ł	\$ (1,274,697)	\$ (58,626,855)	\$ (59,901,552)	\$ (36,889,363)
1		(49,472,345)	(49,472,345)	(12,173,986)
ı	_	(21,500,000)	(21,500,000)	(17,700,000)
ı	\$ (1,274,697)	\$ (129,599,200)	\$ (130,873,897)	\$ (66,763,349)
ı	\$ —	\$ 75,446,260	\$ 75,446,260	\$447,100,705
ı	158,329,346	269,196,287	427,525,633	21,095,249
ı	1,274,697	129,599,200	130,873,897	66,763,349
ı	(16,265,811)	(7,512,033)	(23,777,844)	(1,995,000)
1	(130,091,591)	130,091,591	_	_
ı	\$ 13,246,641	\$ 596,821,305	\$ 610,067,946	\$532,964,303
	\$ 13,246,641	\$ 730,090,466	\$ 743,337,107	\$566,794,189
ı	_	566,794,189	566,794,189	

**\$ 13,246,641 \$1,296,884,655 \$1,310,131,296 \$566,794,189** 

## Pension Reserves Investment Trust Fund Notes to financial statements

June 30, 1986

Note I Description of the Pension Reserves Investment Trust Fund

The Pension Reserves Investment Trust Fund (PRIT) was created in 1984 by the Commonwealth of Massachusetts through legislation (Chapter 661 of the Acts of 1983) to serve as the investment portfolio for the assets of state and local retirement systems joining PRIT. The Pension Reserves Investment Management Board (the Board) was created by the same legislation to manage PRIT. Operations of PRIT began October 1, 1984.

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Systems joining PRIT have the option to be Participating or Purchasing Systems. Participating Systems must transfer all of their retirement system assets to PRIT. Those systems qualifying as Participating Systems share in the annual appropriation made to PRIT by the Commonwealth of Massachusetts based on the Participating System's net assets in PRIT at the beginning of the fiscal year. In fiscal 1986, all Participating Systems joining on or before July 1, 1985 shared in the Commonwealth's fiscal 1986 appropriation which totaled \$21.5 million. Purchasing Systems, along with the Participating Systems, share in the investment earnings of PRIT based on their proportionate share of net assets (see Note 2). PRIT member systems as of June 30, 1986, along with the date they joined, were as follows:

- Commonwealth of Massachusetts Pension Reserves Fund, October 1984
- Town of Weymouth Contributory Retirement System, October 1984
- Town of Shrewsbury Contributory Retirement System, May 1985
- Minuteman Regional Vocational Technical School District Contributory Retirement System, June 1985
- Town of Needham Contributory Retirement System, July 1985
- Town of Wakefield Contributory Retirement System, July 1985
- Norfolk County Retirement Board, November 1985

In addition, the Town of Hingham Contributory Retirement System became a Purchasing System in May 1986.

PRIT consists of two funds, the Capital Fund and the Cash Fund. The Capital Fund serves as the long-term asset portfolio. The portfolio asset allocation plan includes stocks, bonds, money market investments, real estate and venture capital. The Cash Fund consists of short-term investments which are used to meet the liquidity requirements of the various Participating and Purchasing Systems.

During the period from October I, 1984 to June 30, 1985, only the Capital Fund was operational. All unit sales and repurchases, therefore, were made through this fund. The Cash Fund began operating on July I, 1985.

Note 2 Summary of significant accounting policies The following is a summary of significant accounting policies followed by PRIT, which are in conformity with those generally accepted in the investment company industry.

**Reclassification of account balances** Certain 1985 account balances have been reclassified in order to conform with the 1986 presentation.

**Valuation of investments** Security transactions are recorded on the trade date of the securities purchased or sold. The cost of a security is the purchase price or, in the case of assets transferred to PRIT by a new system, the market value of the securities on the transfer date. The Capital Fund is valued at monthend while the Cash Fund is valued daily.

Investments in bonds and United States Government agency and Treasury obligations are valued by an independent pricing service. In determining the price, the service reflects such factors as security prices, yields, maturities and rating, supplemented by dealer quotations. Money market and other short-term investments are recorded using the amortized cost method, which approximates market value. Investments in equity securities traded on national securities exchanges are valued at the last sale price, or, if no sale, at the closing bid price. Securities traded on any other exchange are valued in the same manner, or, if not so traded, on the basis of closing over-the-counter bid prices. Investments in real estate are valued at estimated market values as of June 30, 1986, while investments in venture capital are valued at cost which, in the Board's opinion, approximates fair value as of June 30, 1986.

Dividend income is recorded on the ex-dividend date and interest income is recorded when earned. Gains and losses from sales of investments are calculated on the average cost method.

#### **Fund units**

Capital Fund: The number of units resulting from the initial transfer of a retirement system's assets to PRIT or from the subsequent sales or repurchases of units is calculated by dividing the market value of the assets involved by the unit price at the end of the month.

Net investment income and net realized gains are reinvested in units at the end of each month as follows:

- Net investment income and net realized gains for the month are allocated between the systems based on their proportionate share of the net assets at the beginning of the month.
- The allocated portions are then divided by the beginning-of-the-month unit price, adjusted for the change in unrealized appreciation (depreciation) of investments during the current month, to determine each system's incremental number of units.

Note 2: Summary of significant accounting policies, continued  If the Capital Fund incurs net realized losses, the losses are allocated between the systems using the same method as for gains, thereby reducing the number of units held by each system.

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Cash Fund: Sales and repurchases of units by the systems are recorded in the Cash Fund on the trade date at the fund's daily price of approximately \$1.00 per unit. Net investment income is allocated daily between the systems based on their proportionate share of net assets on the previous day, adjusted for the current day's sales and repurchase of units. The allocated portions are then reinvested in units at monthend at the daily fund price of approximately \$1.00.

Note 3: Management fees In accordance with the Board's Operating Trust, all expenses incurred by the Board in managing PRIT are charged to PRIT in the form of management fees. These fees primarily consist of investment manager, consultant and custodian fees, professional fees, salaries and other operating expenses of the Board.

Investment managers Investment manager compensation is generally based on a fixed percentage of net assets under management, except for Kohlberg, Kravis & Roberts whose compensation is based on a fixed percentage of assets committed (\$25 million as of June 30, 1986). During fiscal 1986, the following firms served as investment managers of certain PRIT assets:

Assets		1986
managed as of		management
June 30, 1986	Investment manager	fees
	Equity	
\$269,000,000	Alliance Capital Management Corporation	\$ 99,200
75,000,000	Bear, Stearns & Co.	148,000
53,000,000	The Boston Company Institutional Investors, Inc.	91,700
115,000,000	Trinity Investment Management Corp.	257,800
120,000,000	Lazard Freres & Co.	234,600
73,000,000	Wright Investors' Service	149,200
27,000,000	U.S. Trust Co.	35,900
	Fixed income	
208,000,000	Lehman Management Co., Inc.	101,000
88,000,000	Putnam Advisory Co., Inc.	143,800
58,000,000	Endowment Management and Research Corp.	128,500
71,000,000	One Federal Asset Management, Inc.	86,600
27,000,000	M.D. Sass Investors' Services, Inc.	48,400
	Real estate	
26,400,000	Bank of Boston	120,900
16,000,000	Copley Real Estate Advisors, Inc.	93,800
8,200,000	JMB Realty Corp.	25,000
	Venture capital	
500,000	Davis Venture Partners	500
	Kohlberg, Kravis & Roberts and Co.	31,300
875,000	Venture Capital Fund of N.E.	5,500
400,000	Southern California Ventures II	600
3,000,000	John Hancock Venture Capital Management, Inc.	17,500
		\$1,819,800



Investment consultant Wilshire Associates (Wilshire) serves as the pension investment consultant for the Board. Wilshire provides comprehensive pension investment consulting services including recommendations on asset allocation; development of objectives, policies and guidelines for the Board and for the individual investment managers selected by the Board; assistance in the screening, interviewing and selection of investment managers; and measurement of external and internal performance for PRIT and the individual investment managers. As compensation for its services, Wilshire received fees of approximately \$125,000 for the year ended June 30, 1986 and \$67,700 for the period ended June 30, 1985.

Investment custodian State Street Bank and Trust Company (State Street) serves as the PRIT investment custodian and recordkeeper. State Street records all daily transactions for PRIT, including investment sales and purchases, investment income, expenses paid by PRIT and all fund unit activity for the PRIT member systems. State Street also has physical custody of PRIT's assets. State Street receives an annual fee of \$7,000 per actively managed portfolio plus an annual asset fee based on the market value of PRIT. The annual asset fee is calculated as follows:

0.02% on the first \$500 million 0.015% on the next \$500 million 0.01% on the balance

State Street's compensation totaled approximately \$343,400 for the year ended June 30, 1986 and \$65,500 for the period ended June 30, 1985.

### Note 4: Purchases and sales of investments

During the year ended June 30, 1986, the cost of investments purchased and the proceeds from investments sold, excluding temporary investments, were \$2,894,036,071 and \$2,351,572,107, respectively. During the period October I, 1984 to June 30, 1985, the cost of investments purchased and the proceeds from investments sold, excluding temporary investments, were \$565,408,803 and \$345,268,819, respectively.

## Note 5: Commitments and contingencies

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As of June 30, 1986, PRIT had forward commitments to invest \$87 million in real estate, \$36 million in venture capital, \$55 million in fixed income securities and \$45 million in international investments.

#### Notes to financial statements, continued

Note 6: Subsequent events Subsequent to June 30, 1986, the following events took place:

- The Contributory Retirement Systems of the Towns of Saugus, Fairhaven, Montague and Milton became Participating Systems. The approximate market values of these assets at the date of transfer were \$6.2, \$3.1, \$2.0, and \$9.5 million, respectively. In addition, the Pension Reserves Fund contributed \$277 million to its account after yearend.
- The fiscal year 1987 state appropriation to be allocated among the Participating Systems in PRIT as of July 1, 1986 is budgeted by the Commonwealth of Massachusetts to be \$23.9 million.
- PRIT joined State Street's security lending program. Under this program, PRIT
  receives a fee for allowing selected brokerage firms to borrow certain of its securities for a predetermined period of time, securing such loans with collateral consisting of cash equaling 102% of the market value of the securities borrowed.
- On August 5, 1986, the Board approved additional commitments to invest \$45 million in real estate, \$32.5 million in venture capital, \$162 million in fixed income securities and \$120 million in international investments.
- PRIT hired State Street as global custodian for international investments and also funded six international investment managers. As of August 8, 1986, \$165 million has been invested with these managers.

## Pension Reserves Investment Trust Fund Schedule of investments as of June 30, 1986



Shares/			
principal			Market
amount		Cost	value
	Equities		
1,202,109	Basic industries	\$ 37,292,545	\$ 43,158,960
2,063,782	Consumer basics	65,402,969	87,700,297
587,650	Consumer durable goods	21,175,101	25,756,300
917,630	Capital goods	34,345,344	37,242,799
1,901,679	Consumer nondurables	61,448,164	86,399,490
809,025	Consumer services	19,015,428	23,535,216
1,373,487	Energy	40,963,982	37,422,043
1,618,328	Finance	57,265,920	69,277,534
1,111,175	General business	38,756,997	47,570,725
312,024	Conglomerates	14,126,284	17,136,114
637,906	Shelter	17,785,136	23,201,363
1,807,768	Technology	58,121,243	62,949,700
740,650	Transportation	25,697,042	29,399,975
3,254,685	Utilities	95,897,016	122,665,165
191,675	Miscellaneous	4,695,870	5,010,383
	Total equities	\$591,989,041	\$718,426,064
	U.S. Government agency		
	and Treasury obligations		
\$ 5,078	and Treasury obligations Farmers Home		
\$ 5,078	and Treasury obligations Farmers Home Administration Insured		
	and Treasury obligations Farmers Home Administration Insured Notes, 9.875%, 9/19/1989	\$ 5,059	\$ 3,818
\$ 5,078	and Treasury obligations Farmers Home Administration Insured Notes, 9.875%, 9/19/1989 Federal Farm Credit Banks	\$ 5,059	\$ 3,818
	and Treasury obligations Farmers Home Administration Insured Notes, 9.875%, 9/19/1989 Federal Farm Credit Banks with rates ranging from	\$ 5,059	\$ 3,818
	and Treasury obligations Farmers Home Administration Insured Notes, 9.875%, 9/19/1989 Federal Farm Credit Banks with rates ranging from 7.75% to 14.10% and	\$ 5,059	\$ 3,818
	and Treasury obligations Farmers Home Administration Insured Notes, 9.875%, 9/19/1989 Federal Farm Credit Banks with rates ranging from 7.75% to 14.10% and maturities ranging from		
28,655,000	and Treasury obligations Farmers Home Administration Insured Notes, 9.875%, 9/19/1989 Federal Farm Credit Banks with rates ranging from 7.75% to 14.10% and maturities ranging from 9/2/1986 to 10/20/1993	\$ 5,059 28,849,685	\$ 3,818
	and Treasury obligations Farmers Home Administration Insured Notes, 9.875%, 9/19/1989 Federal Farm Credit Banks with rates ranging from 7.75% to 14.10% and maturities ranging from 9/2/1986 to 10/20/1993 Federal Home Loan Banks		
28,655,000	and Treasury obligations Farmers Home Administration Insured Notes, 9.875%, 9/19/1989 Federal Farm Credit Banks with rates ranging from 7.75% to 14.10% and maturities ranging from 9/2/1986 to 10/20/1993 Federal Home Loan Banks with rates ranging from		
28,655,000	and Treasury obligations Farmers Home Administration Insured Notes, 9.875%, 9/19/1989 Federal Farm Credit Banks with rates ranging from 7.75% to 14.10% and maturities ranging from 9/2/1986 to 10/20/1993 Federal Home Loan Banks with rates ranging from 10.20% to 12.50% and		
28,655,000	and Treasury obligations Farmers Home Administration Insured Notes, 9.875%, 9/19/1989 Federal Farm Credit Banks with rates ranging from 7.75% to 14.10% and maturities ranging from 9/2/1986 to 10/20/1993 Federal Home Loan Banks with rates ranging from 10.20% to 12.50% and maturities ranging from	28,849,685	31,591,017
28,655,000 48,885,000	and Treasury obligations Farmers Home Administration Insured Notes, 9.875%, 9/19/1989 Federal Farm Credit Banks with rates ranging from 7.75% to 14.10% and maturities ranging from 9/2/1986 to 10/20/1993 Federal Home Loan Banks with rates ranging from 10.20% to 12.50% and maturities ranging from 3/25/1987 to 12/27/1993		
28,655,000	and Treasury obligations Farmers Home Administration Insured Notes, 9.875%, 9/19/1989 Federal Farm Credit Banks with rates ranging from 7.75% to 14.10% and maturities ranging from 9/2/1986 to 10/20/1993 Federal Home Loan Banks with rates ranging from 10.20% to 12.50% and maturities ranging from 3/25/1987 to 12/27/1993 Federal Home Loan Pools	28,849,685	31,591,017
28,655,000 48,885,000	and Treasury obligations Farmers Home Administration Insured Notes, 9.875%, 9/19/1989 Federal Farm Credit Banks with rates ranging from 7.75% to 14.10% and maturities ranging from 9/2/1986 to 10/20/1993 Federal Home Loan Banks with rates ranging from 10.20% to 12.50% and maturities ranging from 3/25/1987 to 12/27/1993 Federal Home Loan Pools with rates ranging from	28,849,685	31,591,017
28,655,000 48,885,000	and Treasury obligations Farmers Home Administration Insured Notes, 9.875%, 9/19/1989 Federal Farm Credit Banks with rates ranging from 7.75% to 14.10% and maturities ranging from 9/2/1986 to 10/20/1993 Federal Home Loan Banks with rates ranging from 10.20% to 12.50% and maturities ranging from 3/25/1987 to 12/27/1993 Federal Home Loan Pools with rates ranging from 6.25% to 8.50% and	28,849,685	31,591,017
28,655,000 48,885,000	and Treasury obligations Farmers Home Administration Insured Notes, 9.875%, 9/19/1989 Federal Farm Credit Banks with rates ranging from 7.75% to 14.10% and maturities ranging from 9/2/1986 to 10/20/1993 Federal Home Loan Banks with rates ranging from 10.20% to 12.50% and maturities ranging from 3/25/1987 to 12/27/1993 Federal Home Loan Pools with rates ranging from	28,849,685	31,591,017

See Note 2

Note: A detailed portfolio listing is available for review at the Pension Reserves Investment Management Board's office.

The accompanying notes are an integral part of these financial statements.

## Schedule of investments\*, continued

Principal					Market
amount			Cost		value
	U.S. Government Agency				
	and Treasury obligations, of	ont	.'d		
\$15,415,000	Federal National Mortgage				
	Association with rates				
	ranging from 0% (zero				
	coupon) to 12.25% and				
	maturities ranging from 4/10/1987 to 7/5/2014	\$	11,757,488	Œ	12 054 524
33,300,594	Government National	Ф	11,737,400	\$	12,854,534
33,300,377	Mortgage Association with				
	rates ranging from 7.0% to				
	12.0% and maturities ranging				
	from 2/15/1998 to 12/15/2020		33,701,819		33,777,557
117,319	Small Business Administra-				
	tion with rates ranging from				
	9.875% to 11.875% and				
	maturities ranging from				
	6/18/1986 to 1/27/1993		117,319		117,319
600,000	Twelve Federal Land Banks,				407.100
21.550.000	8.20%, I/22/1990		567,124		607,122
31,550,000	United States Treasury				
	Bonds with rates ranging from 9.0% to 13.25% and				
	maturities ranging from				
	2/15/1994 to 2/15/2015		33,650,146		42,859,522
135,885,000	United States Treasury				, , –
	Notes with rates ranging				
	from 7.50% to 13.75% and				
	maturities ranging from				
	12/31/1986 to 11/15/1994		140,770,450		148,644,011
5,205,000	United States Treasury Secu-				
	rities, zero coupon; maturi-				
	ties ranging from 11/15/1991		1.000.404		2 770 714
	to 11/15/1996 Total U.S. Government		1,999,694	-	2,770,714
	agencies and Treasury				
	obligations	\$	300,052,758	\$	330,732,855
	051184110110	Y	333,332,133	<u> </u>	
¢(0,055,737	Fixed income investments				
\$60,955,737	Corporate Bonds with rates ranging from 4.625% to				
	16.0% and maturities ranging				
	from 12/1/1986 to 4/1/2006	\$	51,602,690	\$	54,613,063
30,821,000	Utilities, with rates ranging	*			, ,
	from 3.0% to 17.50% and				
	maturities ranging from				
	7/1/1986 to 2/15/2025		26,627,180		29,446,358

Principal amount			Cost		Market value
amount	Fixed income investments, cont'd				·
\$ 2,550,000	Convertible Bonds with rates ranging from 0% (zero coupon) to 11.0% and maturities ranging from 4/15/1994	ď	1 901 400	\$	2,301,813
15,920,000	to 7/15/2010 Finance, with rates ranging from 8.0% to 15.75% and maturities ranging from	\$	1,981,600	4	
1,250,000	II/18/1986 to 6/15/2005 Foreign Bonds with rates ranging from 10.125% to 14.625% and maturities ranging from 8/31/1992 to		14,933,406		15,866,864
832,468	6/15/2009 Insurance Contracts; floating rate maturing 6/29/1993 and		1,311,461		1,578,102
	12% rate maturing 3/2/1988  Total fixed income		832,468		832,468
	investments	\$	97,288,805	\$	104,638,668
	Money market investments State Street Short Term				
	Investment Fund Certificate of deposit Massachusetts Municipal	\$	84,607,318 5,000,000	\$	84,607,318 5,000,000
	Depository Trust  Total money market	-	458,440	-	458,440
	investments	\$_	90,065,758	\$	90,065,758
	Total real estate	\$	48,000,000	\$	50,632,065
	Total venture capital investments	\$	4,775,000	\$	4,775,000
	Total investments	\$1	,132,171,362	\$1	,299,270,410

\* See Note 2.

Note: A detailed portfolio listing is available for review at the Pension Reserves Investment Management Board's office.
The accompanying notes are an integral part of these financial statements.

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522

011

714

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#### **Pension Reserves Investment Trust Fund**

Report of the independent certified public accountants

To the Pension Reserves Investment Management Board and Member Systems of the Pension Reserves Investment Trust Fund:

We have examined the balance sheet of the Pension Reserves Investment Trust Fund (a statutorily created entity established with the enactment of Chapter 661 of the Acts of 1983) as of June 30, 1986 and 1985, the schedule of investments as of June 30, 1986 and the related statements of operations and changes in net assets for the year ended June 30, 1986 and for the period from October I, 1984 (commencement of operations) to June 30, 1985. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances, including confirmation of investments owned at June 30, 1986 and 1985 by correspondence with the custodian.

In our opinion, the financial statements referred to above present fairly the financial position of the Pension Reserves Investment Trust Fund as of June 30, 1986 and 1985, and the results of its operations and the changes in its net assets for the year ended June 30, 1986 and for the period from October I, 1984 to June 30, 1985, in conformity with generally accepted accounting principles applied on a consistent basis.

arthur Chreleisen a Co

August 8, 1986.

#### Members of the PRIM Board

The members of the Pension Reserves Investment Management Board consist of designated representatives of the governor and the state treasurer, as well as elected and appointed representatives of state, county and municipal employees. By law, one member must be a private citizen experienced in the field of investment or financial management, one must be a member of a participating retirement board,\*

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two must be representatives of employee organizations, two must be elected by state employees and teachers, and one must be the Commissioner of Public Employee Retirement Administration. Members serve without compensation



T. Dustin Alward, appointed by the Governor, is President of the Professional Firefighters Association of Massachusetts, AFL-CIO. Term expires 3/30/87.



Joseph Bonavita, appointed by the State Treasurer, is Executive Director of the American Federation of State, County and Municipal Employees, Council 93, AFL-CIO. Term expires 4/27/88.



Robert Q. Crane, Chairman, is the Treasurer of the Commonwealth of Massachusetts. Ex-officio member.



George E. Filion, elected by the members of the State Teachers' Retirement System, is a retired public school teacher and administrator from Salem. Massachusetts. Term expires 7/20/87.



Arthur J. Gutierrez, appointed by the State Treasurer, is President of The Gutierrez Company, a real estate development firm, located in Burlington, Massachusetts. Term expires 6/5/89.



John J. McGlynn, Vice Chairman, is the Commissioner of the Division of Public Employee Retirement Administration. Ex-officio member.



B.J. Rudman, a designee of the Governor, is Assistant Secretary for Management, Executive Office for Administration and Finance. Ex-officio member.



Ralph W. White, elected by the members of the State Retirement System, is President of the Retired State, County and Municipal Employees Association of Massachusetts. Term expires 7/20/87.

#### Organization and management

The PRIM Board's offices are located in Boston. The staff is comprised of professionals and support personnel with qualifications in the fields of finance, modern portfolio management, law, business administration, accounting, and retirement board administration. Each member of the senior staff is responsible for a component of the overall agency operation.

Paul F. Quirk Executive Director

Joseph I. Martin
Deputy Director/General
Counsel

Sandra Clark Whiston Deputy Director/ Administration

Philip D. Kett Chief Investment Officer

Daniel J. Kelly Director of Program Development

#### Legal and financial services

Legal counsel Mintz, Levin, Cohn, Ferris, Glovsky & Popeo, P.C., Dr., Boston

Fund advisor
Wilshire Associates, Santa Monica

Equity managers
Alliance Capital Management Corporation, New York City
Bear, Stearns & Co., New York City
The Boston Company Institutional Investors, Inc., Boston
Lazard Freres Assets Management, New York City
Trinity Investment Management Corp., Boston
United States Trust Co. of Boston, Boston
Wright Investors' Service, Bridgeport

Fixed income managers
Endowment Management and Research Corporation, Boston
Lehman Management Co., Inc., New York City
One Federal Asset Management, Inc., Boston
The Putnam Advisory Company, Inc., Boston
M.D. Sass Investors' Services, Inc., New York City

Real estate managers
Bank of Boston, Boston
Copley Real Estate Advisors, Inc., Boston
JMB Institutional Realty Corporation, Chicago

Venture capital managers
Davis Venture Partners, Tulsa
John Hancock Venture Capital Management, Inc., Boston
Kohlberg, Kravis & Roberts and Co., New York City
Southern California Ventures II, San Diego
Venture Capital Fund of N.E., Boston

Independent certified public accountants Arthur Andersen & Co., Boston

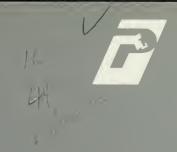
Master trustee
State Street Bank and Trust Company, Boston

Pension Reserves Investment Management Board

Boston, Massachuset 617.227.7788

Design
Sametz Blackstone Associates. Boston
Photogrophy
John Earle, Somerville
Typesetting
Monotype Composition, Boston
Printing
Reynolds-DeWalt Printing, New Bedford





Annual report for the year ended June 30, 1987

PENSION

RESERVES

INVESTMENT

T R U S T

F U N D

Since operations began on October I, 1984, the Pension Reserves Investment Management (PRIM) Board has worked to implement a long term investment strategy and to develop a broadly diversified portfolio which would enhance investment returns and thereby reduce the unfunded liabilities plaguing public retirement systems in the Commonwealth.

04

This report highlights
the process of creative
diversification
employed by the PRIM
Board in managing the
Pension Reserves
Investment Trust (PRIT)
portfolio.

#### Statement by the Chairman and Executive Director



#### Overview

June 30, 1987 marked the close of the Pension Reserves Investment Management Board's third year of operations. During this period, the Fund evolved from a fixed income portfolio of some \$400 million into a broadly diversified portfolio with assets in excess of \$2 billion. During fiscal 1987 alone, assets have grown by more than 65%. The number of retirement systems that have chosen to participate in this innovative program has risen by 112%, from 8 to 18, during this period.

Investment performance has also been impressive. The Fund's return for the 12 month period ending June 30, 1987 was 13.08% with an annualized return since inception of over 20%.

Time and experience have wrought positive changes in the composition of the portfolio. The PRIM Board continues to seek creative and innovative investments for the Fund in order to enhance returns, minimize risk, and further strengthen the financial condition of participating retirement systems.

In this, the PRIT Fund's third annual report, we will outline some of the key elements of the Board's investment strategy and preview the agency's goals for the coming year.

Asset allocation

Domestic equities, 40%, 43.5%

**Target** 

Actual

As of June 30, 1987

Fixed income, 30%, 33.8°.

International, equities 10%, 12.5%

Real estate, 15%, 6.2%

Alternative investments, 5%, 2%

Cash equivalents, 1.9%



Equity and fixed
income investments
are the major components of any wellbalanced portfolio.

Diversification among
and within these classes
of securities is central
to the PRIM Board's
investment strategy.



#### The plan

Diversification is the process of making investments in assets whose returns are not related. The differing patterns of returns between separate asset classes results in lower overall risk when such assets are combined in a single portfolio.

Financial achievements for any fund will be determined largely by the chosen mix of stocks, bonds, cash, and other investments. Selection of the optimal asset mix depends on three key elements:

the present and potential actuarial condition of the fund;

the anticipated returns and risks associated with each asset class;

the risk tolerance attitudes of those responsible for the fund's management.

The PRIM Board's strategy is to diversify assets among and within the various asset classes in order to maximize returns with acceptable levels of risk

#### **Equities**

Historical analyses reveal that, over time, no other capital market provides greater returns than those provided by equities. However, such returns are not achieved without a certain level of risk. PRIT Fund investments in the domestic equity market are well diversified in order to provide exposure to a wide variety of market sectors and investment styles.

Based on asset size alone, most local public employee retirement systems are unable to hire a broad array of investment managers of differing styles and therefore find their investment returns inextricably linked to the performance of a single manager. By choosing to participate in the PRIT Fund, local retirement systems can avoid such risk.



International equity
markets provide
investment opportunities which are usually
unavailable to small
institutional investors.
The entire PRIT port-

folio, is invested under
South Africa-free
guidelines.



# International equities

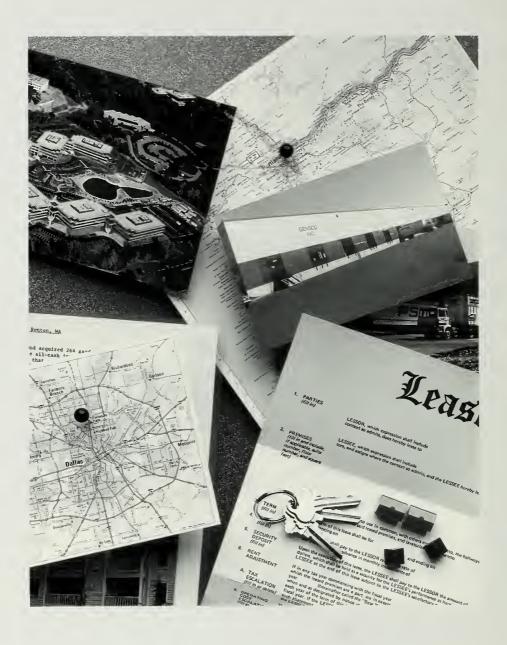
During fiscal 1987, the Board funded six international managers of varying styles to manage non-US equity portfolios. Contrary to the popular belief that such investments are 'riskier,' this diversification actually lowers the portfolio's overall risk and also serves to improve returns.

During 1987, PRIT Fund participants shared in the dramatic returns posted in the world markets which, measured by the EAFE Index, returned over 59% for the period.

#### **Fixed income**

Conventional wisdom has always indicated that fixed income instruments were a very 'safe' investment. In reality, a careful evaluation of market history since 1976 reveals that bond volatility has risen by over 50%. In combination with the huge increase in the number and types of securities available — most notably mortgage-backed securities — the bond market has become both riskier and more complex.

The PRIM Board has responded to these fundamental changes in a variety of ways. A substantial portion of the Fund's fixed income allocation has been indexed in order to provide market returns at reduced costs. In addition, active managers have been hired to complement this indexed core and provide specialization in particular sectors.



Rei

The Fund's real estate
investments provide
steady and predictable
income and a hedge
against inflation. The
portfolio is diversified
by property type, geographic location, and
financing structure.



#### Real estate

Equity real estate has been the fastest growing component of pension and endowment fund portfolios over the past decade. In the past two years, most new money flowing into real estate investments has come from public pension funds seeking to diversify their portfolios and make them less sensitive to inflation.

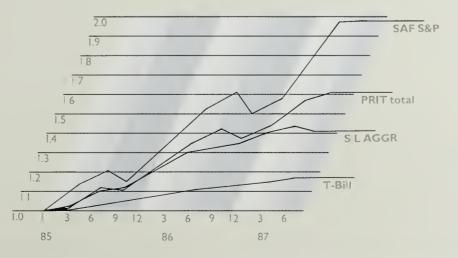
The PRIM Board has adopted a real estate allocation of 15% of the total portfolio and has worked aggressively toward achieving that target. Investments in open and closed end funds totalling over \$124 million dollars have been placed. A separate account relationship with an investment manager has been established in order to structure a diversified portfolio of equity real estate solely for the benefit of PRIT Fund participants.

As of June 30, 1987, 6.2% of the PRIT Fund's assets were actually invested in equity real estate. The real estate portfolio includes investments in over 60 different properties through participation in open and closed end funds as well as direct investments in 2 properties. Included are industrial, office, retail, and residential properties geographically dispersed across the United States. The Board's goal for the coming year is to move closer to the target allocation of 15%.

Growth of a dollar

From January, 1985

through June, 1987





finances the creation
of new products and
companies. A broad
range of goods and services, from gourmet
cookware to computer
hardware, is represented in the venture
capital portfolio.



### **Alternative** investments

The investment of public pension fund monies in alternative investments such as venture capital partnerships and leveraged buyouts (LBO's) has increased significantly over the past several years. Real returns of between 15–20% are reasonable and conservative estimates of the result of such investments. The PRIM Board has adopted a target allocation of 5% for this asset class.

Since greater returns by definition imply increased risk, the alternative investment component of the PRIT Fund portfolio is designed to be well diversified by industry, stage of financing, and geographic location.

Venture capital is defined as the financing of young, relatively small and rapidly growing companies that do not have access to public equity or debt-oriented institutional financing. Venture capital partnerships are set up for the sole purpose of investing in and managing these companies. All such partnerships are carefully screened and monitored by the Board.

Typically, venture capital partnerships complete the initial investment process within 4 years and begin to see the return on those investments in the sixth year. The PRIT Fund venture capital portfolio, while young by industry standards, will provide substantial returns to Fund participants as these investments mature. The PRIM Board has committed \$25.5 million to six venture capital partnerships of which \$10.775 million has actually been drawn down and invested.



The Beatrice LBO is an example of the opportunities available to participants who on their own, do not have the access or assets to make these investments.



A *leveraged buyout* or 'LBO' is the purchase of a company by a small group of investors through a transaction financed largely by borrowing (leverage). The object is to invest in a company with strengths and/or assets that offset the risk of the relatively large amounts of debt used to acquire the company.

Substantial returns are realized in two ways by the limited partners in an LBO: assets such as subsidiary companies or real estate may be sold, and/or the acquired company may be reorganized and again taken public to be traded on the stock exchange, thereby providing a market for its shares.

The PRIT Fund has committed a total of \$50 million to two LBO partnerships. By June 30, 1987, \$28.3 million had actually been drawn down and invested in four separate buyouts.

The PRIT Fund's LBO investments provide another example of the benefits which accrue to local system participants who, by virtue of their size, would have neither the access or assets to avail themselves of these investment opportunities on an individual basis.

# Realized gains, 11% Unrealized (market value) appreciation, 9% Fiscal 1987 appropriation, 3%



Utilizing the Fund's
assets to stimulate the
construction of multifamily housing at a
market rate of return
is the goal of the
Massachusetts
Housing Program.



#### **New initiatives**

Fundamental to the overall mission of prudently investing the assets of Fund participants is the Board's statutory mandate that, whenever possible, the assets of the Fund be invested to improve the economic climate of the Commonwealth. That task is all the more challenging in view of the fiduciary responsibilities borne by the Board which dictate that all investments comply with the 'prudent person' standard and provide the Fund with a market rate of return.

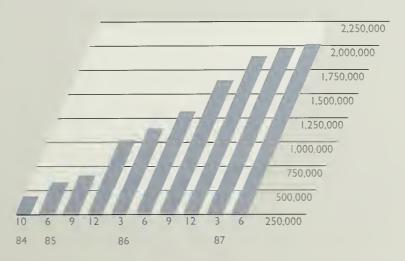
The Massachusetts Housing Program represents the collaboration of the PRIT Fund and the two State Retirement Systems to provide a funding source for the construction of multi-family housing in the Commonwealth. PRIT and the State funds receive a market rate of return on the monies invested, and at the same time are able to stimulate the construction of much needed housing to support the surging economy of the Commonwealth.

In tandem with other institutional investors, the PRIM Board has also made commitments to two outstanding private placements; one focusing on the entertainment industry, and the other in oil and gas exploration. These two investments account for approximately .37% of the total PRIT portfolio.

Growth in assets

Since inception

Dollars in thousands





Cor

The Fund's equity
investments are well
diversified within market sectors and by
management style.
The Board's aggressive
strategy has taken full
advantage of recent
stock market
advances.



#### Conclusion

In its first three years of operation the PRIT Fund has enjoyed enormous success in terms of asset growth, increased local participation, and most importantly, investment return. These successes are largely due to the support and confidence of the members of both branches of the Massachusetts Legislature, the Executive branch, and the membership, boards and staff of public retirement systems in the Commonwealth.

The PRIM Board will continue to seek out sound and innovative investments for the Fund and is confident that its asset allocation and diversification strategy will continue to provide strong economic benefits to the Fund's participants and the citizens of Massachusetts.

Robert Q. Crane, Treasurer

Robert Q. Crane

Jane F. Suit

Paul F. Quirk, Executive Director

Town of Weymouth

Case history

From October 20, 1984

through June 30, 1987

Investment earnings, \$4,462,241.52

Net contributions, \$5,492,240.44

State appropriations, \$1,258,252.60

Initial transfer, \$8,715,032.00

Total market value, \$19,927,766.56



ine alternative investments is important to
an overall strategy.

Two such opportunities, in the entertainment industry and in
oil and gas exploration, have been
undertaken.



Pension Reserves
Investment Trust
Fund

Financial statements as of June 30, 1987 and June 30, 1986

#### **Balance** sheet

June 30

#### **Assets**

Investments at market value (cost of \$1,827,481,385 and \$1,132,171,362 at

C35

\$1.9

\$1,98

June 30, 1987 and 1986, see Schedule of Investments) (Note 2):

Equities

U.S. Government agency and Treasury obligations

Fixed income investments

Money market investments

Real estate

Alternative investments

International investments

Total investments

Cash

Dividend and interest income receivable (Note 2)

Receivable for investments sold

Other assets

**Total assets** 

#### Liabilities

Management fees payable (Note 3)

Payable for investments purchased

Other liabilities

Total liabilities

## Commitments and contingencies

(Note 5)

#### Net assets

Fund units (1,643,682,393 and 1,082,732,373 Capital Fund units outstanding at June 30, 1987 and 1986 and 1,987,821 and 13,246,641 Cash

Fund units outstanding at June 30, 1987 and 1986) (Notes 1 and 2)

Net unrealized gain on investments

**Total net assets** (equivalent to \$1.23 and \$1.20 per Capital Fund unit based on 1,643,682,393 and 1,082,732,373 units outstanding at June 30, 1987 and 1986 and \$1.00 per Cash Fund unit based on 1,987,821 and 13,246,641 units outstanding at June 30, 1987 and 1986)

The accompanying notes are an integral part of these financial statements.



1986	1987		
Tota	Total	Capital Fund	Cash Fund
\$ 718,426,064	\$ 874,524,957	\$ 874,524,957	\$ —
330,732,855	490,964,626	490,964,626	
104,638,668	182,927,846	182,927,846	
90,065,758	86,287,544	84,305,000	1,982,544
50,632,065	124,998,975	124,998,975	
4,775,000	39,619,977	39,619,977	_
	254,663,130	254,663,130	
\$1,299,270,410	\$2,053,987,055	\$2,052,004,511	\$1,982,544
7,068	51,487	42,912	8,575
11,837,372	18,061,442	18,044,078	17,364
26,148,718	17,708,038	17,708,038	
_	19,836	19,836	
\$1,337,263,568	\$2,089,827,858	\$2,087,819,375	\$2,008,483
\$ 79,170	\$ 948,000	\$ 948,000	\$ —
27,053,102	43,543,268	43,543,268	_
_	15,691,256	15,670,594	20,662
\$ 27,132,272	\$ 60,182,524	\$ 60,161,862	\$ 20,662
\$1,143,032,248	\$1,803,139,664	\$1,801,151,843	\$1,987,821
167,099,048	226,505,670	226,505,670	
¢1.210.121.20	¢2 020 / 45 22 4	¢2 027 / 57 5 L 2	¢1 007 021
\$1,310,131,296	\$2,029,645,334	\$2,027,657,513	\$1,987,821

2 at

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#### Statement of operations

For the years ended June 30

Investment income

Interest

Dividends

Security lending income (Note 6)

\$ 463.

1 \$ 463.

Real estate income

Total investment income

Less: Management fees (Note 3)

Less: Interest expense

Net investment income

Realized and

Realized gain on investments

unrealized gain on

Increase in unrealized gain on investments

investments

Net gain on investments

State appropriations (Note I)

Increase in net

assets resulting

from operations

**Total** 

The accompanying notes are an integral part of these financial statements.



		1987	1986
ash Fund	Capital Fund	Total	Total
463,584	\$ 64,140,170	\$ 64,603,754	\$ 45,688,396
_	25,853,804	25,853,804	17,584,245
_	216,434	216,434	_
10	5,282,532	5,282,532	
463,584	\$ 95,492,940	\$ 95,956,524	\$ 63,272,641
	6,619,313	6,619,313	3,371,089
_	262,934	262,934	_
463,584	\$ 88,610,693	\$ 89,074,277	\$ 59,901,552
_	\$ 82,239,420	\$ 82,239,420	\$ 49,472,345
_	59,406,623	59,406,623	133,269,161
	\$141,646,043	\$141,646,043	\$182,741,506
-	\$ 23,900,000	\$ 23,900,000	\$ 21,500,000
463,584	\$254,156,736	\$254,620,320	\$264,143,058

#### Statement of changes in net assets

For the years ended June 30

From operations Net investment income Realized gain on investments Increase in unrealized gain on investments State appropriations (Note I) Increase in net assets resulting from operations Distributions to Net investment income member systems Realized gain on investments from State appropriations Total distributions to member systems From fund unit Proceeds from original unit sales transactions Proceeds from subsequent unit sales Net asset value of units issued to member systems in reinvestment of net investment income, realized gain and state appropriations Cost of units repurchased Interfund transfers Increase (decrease) in net assets derived from fund unit transactions **Net assets** Total increase (decrease) in net assets Beginning of period **End** of period

\$ 6.

24

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The accompanying notes are an integral part of these financial statements.



			1987	1986
	Cash Fund	Capital Fund	Total	Total
~	\$ 463,584	\$ 88,610,693	\$ 89,074,277	\$ 59,901,552
	_	82,239,420	82,239,420	49,472,345
		59,406,623	59,406,623	133,269,161
	\$ 463,584	\$ 230,256,736	\$ 230,720,320	\$ 242,643,058
		23,900,000	23,900,000	21,500,000
	\$ 463,584	\$ 254,156,736	\$ 254,620,320	\$ 264,143,058
	\$ (463,584)	\$ (88,610,693)	\$ (89,074,277)	\$ (59,901,552)
	N -	(82,239,420)	(82,239,420)	(49,472,345)
	_	(23,900,000)	(23,900,000)	(21,500,000)
	\$ (463,584)	\$ (194,750,113)	\$ (195,213,697)	\$ (130,873,897)
4	\$ 6,000,000	\$ 27,666,631	\$ 33,666,631	\$ 75,446,260
	24,072,681	437,352,456	461,425,137	427,525,633
	463,584	194,750,113	195,213,697	130,873,897
	(29,431,020)	(767,030)	(30,198,050)	(23,777,844)
	(12,364,065)	12,364,065		
	\$(11,258,820)	\$ 671,366,235	\$ 660,107,415	\$ 610,067,946
	\$(11,258,820)	\$ 730,772,858	\$ 719,514,038	\$ 74,337,107
	13,246,641	1,296,884,655	1,310,131,296	566,794,189
	\$ 1,987,821	\$2,027,657,513	\$2,029,645,334	\$1,310,131,296

#### Pension Reserves Investment Trust Fund Notes to financial statements

June 30, 1987

# Note I: Description of the Pension Reserves Investment Trust Fund

The Pension Reserves Investment Trust Fund (PRIT) was created in 1984 by the Commonwealth of Massachusetts through legislation (Chapter 661 of the Acts of 1983) to serve as the investment portfolio for the assets of state and local retirement systems joining PRIT. The Pension Reserves Investment Management Board (the Board) was created by the same legislation to manage PRIT. Operations of PRIT began October 1, 1984.

Systems joining PRIT have the option to be Participating or Purchasing Systems. During the year ended June 30, 1987, six systems entered PRIT as Participating Systems and four entered as Purchasing Systems, bringing the total number of Participating and Purchasing Systems to thirteen and five, respectively. Participating Systems must transfer all of their retirement system assets to PRIT. Those systems qualifying as Participating Systems share in the annual appropriation made to PRIT by the Commonwealth of Massachusetts based on the Participating System's net assets in PRIT at the beginning of the fiscal year. In fiscal 1987, all Participating Systems joining on or before July 1, 1986 shared in the Commonwealth's fiscal 1987 appropriation which totaled \$23.9 million. Purchasing Systems, along with the Participating Systems, share in the investment earnings of PRIT based on their proportionate share of net assets (see Note 2).

PRIT consists of two funds, the Capital Fund and the Cash Fund. The Capital Fund serves as the long-term asset portfolio. The portfolio asset allocation plan includes stocks, bonds, money market investments, international investments, real estate and other alternative investments. The Cash Fund consists of short-term investments which are used to meet the liquidity requirements of the various Participating and Purchasing Systems.

#### Note 2: Summary of significant accounting policies

The following is a summary of significant accounting policies followed by PRIT, which are in conformity with those generally accepted in the investment company industry.

Valuation of investments Security transactions are recorded on the trade date of the securities purchased or sold. The cost of a security is the purchase price or, in the case of assets transferred to PRIT by a new system, the market value of the securities on the transfer date. The Capital Fund is valued at monthend, while the Cash Fund is valued daily.

Investments in bonds and United States Government agency and Treasury obligations are valued by an independent pricing service. In determining the price, the service reflects such factors as security prices, yields, maturities and rating, supplemented by dealer quotations. Money market and other short-term investments, both domestic and international, are recorded using the amortized cost method, which approximates market value. Domestic and international investments in equity securities traded on national securities exchanges are valued at the last sale price, or, if no sale, at the closing bid price. Securities traded on any other exchange are valued in the same manner, or, if not so traded, on the basis of closing over-the-counter bid prices.



Investments in real estate are valued at estimated market values as of June 30, 1987. Alternative investments include venture capital, leveraged buyouts, private placements and other investments where the structure, risk profile and return potential differ from traditional equity and bond investments. These investments are valued at fair value, as determined in good faith by the Board, since there are no market quotes available. All alternative investments are stated at cost until significant subsequent events require a change.

Dividend income is recorded on the ex-dividend date and interest income is recorded when earned.

Gains and losses from sales of investments are calculated on the average cost method.

#### **Fund units**

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Capital Fund: The number of units resulting from the initial transfer of a retirement system's assets to PRIT or from the subsequent sales or repurchases of units is calculated by dividing the market value of the assets involved by the unit price at the end of the month.

Net investment income and net realized gains are reinvested in units at the end of each month as follows:

- Net investment income and net realized gains for the month are allocated between the systems based on their proportionate share of the net assets at the beginning of the month.
- The allocated portions are then divided by the beginning-of-the-month unit price, adjusted for the change in unrealized appreciation (depreciation) of investments during the current month, to determine each system's incremental number of units.
- If the Capital Fund incurs net realized losses, the losses are allocated between the systems using the same method as for gains, thereby reducing the number of units held by each system.

Cash Fund: Sales and repurchases of units by the systems are recorded in the Cash Fund at the fund's daily price of \$1.00 per unit. Net investment income is calculated daily for the systems based on their proportionate share of net assets (adjusted for the current day's sale and purchase of units) and is then reinvested in units at monthend.

#### Note 3: Management fees

In accordance with the Board's Operating Trust, all expenses incurred by the Board in managing PRIT are charged to PRIT in the form of management fees. These fees primarily consist of investment manager, consultant and custodian fees, professional fees, salaries and other operating expenses of the Board.

**Investment managers** Investment manager compensation is generally based on a fixed percentage of net assets under management, except for a few managers whose compensation is based on performance. Investment manager fees totaled approximately \$4,096,100 and \$1,819,800 for the years ended June 30, 1987 and 1986, respectively.

Investment consultant Wilshire Associates (Wilshire) serves as the pension investment consultant for the Board. Wilshire provides comprehensive pension investment consulting services, including recommendations on asset allocation; development of objectives, policies and guidelines for the Board and for the individual investment managers selected by the Board; assistance in the screening, interviewing and selection of investment managers; and measurement of external and internal performance for PRIT and the individual investment managers. As compensation for its services, Wilshire received fees of approximately \$183,400 and \$125,000 for the years ended June 30, 1987 and 1986, respectively.

Investment custodian State Street Bank and Trust Company (State Street) serves as the PRIT investment custodian and recordkeeper for both domestic and international investments. State Street records all daily transactions for PRIT, including investment sales and purchases, investment income, expenses incurred by PRIT and all fund unit activity for the PRIT member systems. State Street also provides portfolio performance analysis. State Street receives an annual fee of \$7,000 per actively managed portfolio plus an annual asset fee based on the market value of PRIT.

State Street's compensation totaled approximately \$897,800 and \$343,400 for the years ended June 30, 1987 and 1986, respectively.

#### Note 4:

Purchases and sales of investments

During the year ended June 30, 1987, the cost of investments purchased and the proceeds from investments sold, excluding temporary investments, were \$3,448,292,760 and \$2,841,536,503, respectively. During the year ended June 30, 1986, the cost of investments purchased and the proceeds from investments sold, excluding temporary investments, were \$2,894,036,071 and \$2,351,572,107, respectively.

#### Note 5:

Commitments and contingencies

As of June 30, 1987, PRIT had outstanding commitments to invest \$218.3 million in real estate and \$34.5 million in alternative investments.



Note 6: Security lending program

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In July, 1986, PRIT joined State Street's security lending program. Under this program, PRIT receives a fee for allowing selected brokerage firms to borrow certain of its securities for a predetermined period of time, securing such loans with collateral consisting of cash or securities issued or guaranteed by the U.S. Government equaling 102% of the market value of the securities borrowed. All collateral is held by State Street. At June 30, 1987, the market value of securities on loan was approximately \$27 million for equities, \$11 million for fixed income investments and \$34 million for U.S. Government agency and Treasury obligations. These securities are included in investments at market value as of June 30, 1987 in the accompanying balance sheet.

Note 7: Subsequent events

Subsequent to June 30, 1987, the following events took place:

- The Contributory Retirement Systems of the City of Lowell, the Town of Norwood and the Town of Danvers became Purchasing Systems, contributing \$500,000, \$500,000 and \$250,000, respectively. In addition, the following systems contributed to their accounts after yearend: The Pension Reserves Fund— \$85 million, Norfolk County—\$10 million, Wakefield—\$2 million, Weymouth—\$1 million.
- The fiscal 1988 state appropriation to be allocated among the Participating Systems in PRIT as of July 1, 1987 is budgeted by the Commonwealth of Massachusetts to be \$25 million.

#### Pension Reserves Investment Trust Fund Schedule of investments\* as of June 30, 1987

Shares/			
principal			Market
amount	m-utation	Cost	value
1 502 740	Equities Basic industries	¢ 40 E   4 07/	\$ 61,408,309
1,502,769	Consumer basics	\$ 48,514,876	
2,679,870		83,150,019	115,641,486
979,300	Consumer durable goods	30,010,376	38,388,056
1,483,909	Capital goods	49,929,831	61,100,357
2,635,501	Consumer nondurables	72,484,291	98,364,710
996,962	Consumer services	25,319,294	33,106,555
1,154,787	Energy	49,634,421	63,707,360
1,854,559	Finance	62,945,959	70,297,868
1,094,575	General business	37,010,791	46,999,869
72,900	Conglomerates	3,256,073	2,396,587
461,758	Shelter	14,921,775	20,491,480
2,008,703	Technology	87,678,473	97,233,809
1,056,450	Transportation	32,388,974	40,447,575
3,421,410	Utilities	98,061,842	118,540,974
65,500	Miscellaneous	6,188,239	6,399,962
	Total equities	\$701,495,234	\$874,524,957
	U.S. Government agency an	d	
	and Treasury obligations, co		
\$ 108,597	Small Business Administration		
•	with a rate of 9.875% and a		
	maturity of I/27/1993	\$ 108,597	\$ 108,597
4,500,000	Student Loan Marketing	, ,	,
, ,	Association with rates ranging		
	from 7.75% to 10.90% and		
	maturities ranging from		
	2/28/1990 to 12/29/1996	4,704,468	4,582,964
600,000	Twelve Federal Land Banks,	1,7 0 1, 100	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
333,333	8.20%, 1/22/1990	567,124	601,500
61.055.000	United States Treasury Bonds	557,121	001,000
01,033,000	with rates ranging from 8.0%		
	to 13.25% and maturities		
	ranging from 2/15/1994 to		
	2/15/2016	72,916,352	75,056,766
233,610,000	United States Treasury Notes	72,710,332	75,050,700
233,610,000	with rates ranging from		
	6.125% to 14.25% and		
	maturities ranging from		
	11/15/1987 to 11/15/1996	247,072,460	240,700,887
F 202 000	United States Treasury	247,072,400	240,700,007
5,203,000	Securities with variable rates		
	and maturities ranging from	1 999 734	2,821,158
	11/15/1991 to 11/15/1996	1,999,736	2,021,130
	Total U.S. Government		
	agency and Treasury	¢401 214 00E	\$490,964,626
	obligations	\$491,314,985	φ-170,70-1,020



Principal			Market
amount		Cost	value
\$ 108,597	U.S. Government agency ar and Treasury obligations, co Small Business Administration with a rate of 9.875% and a		
4,500,000	maturity of 1/27/1993 Student Loan Marketing Association with rates ranging from 7.75% to 10.90% and maturities ranging from	\$ 108,597	\$ 108,597
600,000	2/28/1990 to 12/29/1996 Twelve Federal Land Banks,	4,704,468	4,582,964
61,055,000	8.20%, 1/22/1990 United States Treasury Bonds with rates ranging from 8.0% to 13.25% and maturities ranging from 2/15/1994 to	567,124	601,500
233,610,000	2/15/2016 United States Treasury Notes with rates ranging from 6.125% to 14.25% and maturities ranging from	72,916,352	75,056,766
5,203,000	II/15/1987 to 11/15/1996 United States Treasury Securities with variable rates and maturities ranging from II/15/1991 to 11/15/1996	247,072,460	240,700,887
	Total U.S. Government agency and Treasury	1,999,736	2,821,158
	obligations	\$491,314,985	\$490,964,626
\$126,433,000	Fixed income investments Corporate bonds with rates ranging from 3.125% to 16.0% and maturities ranging from 10/1/1987 to 1/15/2017	\$110,815,276	\$108,970,110
55,137,000	Utilities with rates ranging from 3.0% to 17.50% and maturities ranging from	¥	¥103,773,113
1,600,000	7/1/1987 to 10/8/2021 Convertible bonds with a rate of 5.75% and a maturity	48,655,569	48,580,893
22,240,000	of 4/1/2012 Finance with rates ranging from 4.5% to 15.75% and	1,600,000	1,728,000
	maturities ranging from 8/1/1987 to 5/15/2007	22,056,918	21,883,722

The accompanying notes are an integral part of these financial statements.

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3,309 1,486 3,056 ),357

5,555 7,360 7,868 7,869 7,575 1,480 1,809 7,575 1,957

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<sup>\*</sup> See Note 2

#### Schedule of investments\*, continued

Principal amount			Cost		Market value
 amoune	Fixed income investments,	cor			value
\$ 1,035,000	Municipals with rates				
	ranging from 5.25% to 8.5%				
	and maturities ranging from				
	8/I/I988 to 4/I/200I	\$	1,031,435	\$	1,017,508
688,443	Insurance contracts with				
	variable rates and maturities				
	ranging from 1/1/1990 to 6/29/1993		(25.110		(25.110
120,000			625,110		625,110
120,000	Savings and loans with a rate of 10.625% and a maturity of				·
	4/15/1988		122,214		122,503
	Total fixed income		122,217		122,303
	investments	\$	184,906,522	\$1	82,927,846
	vestees			Ψ'	02,727,010
 	Money market				
	investments				
	State Street Short-term				
	Investment Fund	\$	58,736,000	\$	58,736,00
	Certificate of deposit		4,520,022		4,520,022
	Massachusetts Municipal				
	Depository Trust		23,031,522		23,031,522
	Total money market				
	investments	\$	86,287,544	\$	86,287,544
 	Real estate				
	Commercial	\$	91,533,806	\$	93,211,777
	Industrial	•	24,558,948	•	25,674,698
	Residential		6,000,000		6,112,500
	Total real estate	\$	122,092,754	\$	124,998,975
	Alternative investments				
	Funds with investment managers				
	invested in:				
	Investments in nonpublic securities**:				
	Equities	\$	13,331,055	\$	13,331,055
	Debt	Ψ	18,619,997	Ψ	18,619,997
		\$	31,951,052	\$	31,951,052
	Cash, cash equivalents and		.,,	,	, ,
	Treasury obligations		6,940,925		6,940,925
	Limited partnerships		643,500		643,500
	Publicly traded equities		84,500		84,500
	Total alternative				
	investments	\$	39,619,977	\$	39,619,977



Units/			
Principal			Market
amount		Cost	value
	International investments		
	Equities		
1,604,259	Basic industries	\$ 8,923,931	\$ 12,209,156
1,728,097	Consumer basics	17,830,544	20,905,912
611,525	Consumer durable goods	5,131,741	6,284,063
930,587	Capital goods	7,564,255	8,579,605
1,392,091	Consumer nondurables	13,478,483	15,576,860
465,037	Consumer services	3,837,495	4,438,954
1,206,975	Energy	4,869,345	6,102,068
3,303,064	Finance	22,755,817	25,191,540
1,548,765	General business	10,512,726	13,486,254
1,798,000	Conglomerates	3,458,374	5,383,897
998,700	Shelter	6,297,962	8,462,345
1,020,882	Technology	11,545,162	14,519,432
427,500	Transportation	2,638,781	3,209,800
1,032,371	Utilities	6,154,499	7,428,993
52,998,269	Miscellaneous	68,725,370	94,658,695
	Total equities	\$ 193,724,485	\$ 246,437,574
	Foreign government Treasury obligations		
\$ 750,000	United Kingdom Treasury notes with rates ranging from 10.5% to 13.25% and		
	maturities ranging from I/22/1997 to 2/21/1997	\$ 1,411,594	\$ 1,411,556
1,350,000	Fixed income investments Corporate bonds with rates ranging from 10.125% to 14.625% and maturities ranging from 8/31/1992 to		
	6/15/2009	\$ 1,420,697	\$ 1,606,407
	Money market investments		
	Various foreign cash and cash		
	equivalents	\$ 5,207,593	\$ 5,207,593
	Total international		
	investments	\$ 201,764,369	\$ 254,663,130
	Total investments	\$1,827,481,385	\$2,053,987,055

<sup>\*</sup> See Note 2

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14,698 12,500 18,975

31,055 19,997 51,052

40,925 43,501 84,500

19,971

<sup>\*\*</sup>Investments in nonpublic securities break down into the following industries: high technology (\$15,654,962), conglomerates (\$7,269,426), entertainment (\$5,000,000), oil and gas (\$2,629,740), and others (\$1,396,924).

Note: A detailed portfolio listing is available for review at the Pension Reserves Investment Management Board's office.

The accompanying notes are an integral part of these financial statements.

#### **Pension Reserves Investment Trust Fund**



Report of the independent public accountants

To the Pension Reserves Investment Management Board and Member Systems of the Pension Reserves Investment Trust Fund:

We have examined the balance sheet of the Pension Reserves Investment Trust Fund (a statutorily created entity established by the Commonwealth of Massachusetts with the enactment of Chapter 661 of the Acts of 1983) as of June 30, 1987 and 1986, the schedule of investments as of June 30, 1987, and the related statements of operations and changes in net assets for the years ended June 30, 1987 and 1986. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances, including confirmation of investments owned at June 30, 1987 and 1986 by correspondence with the custodian.

In our opinion, the financial statements referred to above present fairly the financial position of the Pension Reserves Investment Trust Fund as of June 30, 1987 and 1986, and the results of its operations and the changes in its net assets for the years ended June 30, 1987 and 1986, in conformity with generally accepted accounting principles applied on a consistent basis.

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September 4, 1987.

The members of the Pension Reserves Investment Management Board consist of designated representatives of the governor and the state treasurer, as well as elected and appointed representatives of state, county and municipal employees. By law, one member must be a private citizen experienced in the field of investment or financial management, one must be a member of a participating retirement board,\* two must be representatives of employee organizations,\* two must be elected by state employees and teachers, and one must be the Commissioner of Public **Employee Retirement** Administration. Members serve without compensation.

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Robert Q. Crane, Chairman, is the Treasurer of the Commonwealth of Massachusetts. Ex-officio member.

Joseph Bonavita, appointed by the State Treasurer, is Executive Director of the American Federation of State, County and Municipal Employees, Council 93, AFL-CIO. Term expires 4/27/88.

Robert Brousseau, elected by the members of the State Teachers' Retirement System, is a teacher in the Wareham public schools. Term expires 7/20/90.

Arthur J. Gutierrez, appointed by the State Treasurer, is President of The Gutierrez Company, a real estate development firm, located in Burlington, Massachusetts. Term expires 6/5/89.

John J. McGlynn, Vice Chairman, is the Commissioner of the Division of Public Employee Retirement Administration. Ex-officio member.

B.J. Rudman, a designee of the Governor, is Assistant Secretary for Management, Executive Office for Administration and Finance. Ex-officio member.

Ralph W. White, elected by the members of the State Retirement System, is President of the Retired State, County and Municipal Employees Association of Massachusetts. Term expires 7/20/90.

### Pension Reserves Investment Management Board

The PRIM Board's offices are located at 200 State Street, Boston. The staff is comprised of professionals and support personnel with qualifications in the fields of finance, modern portfolio management, law, business administration, accounting, and retirement board administration. Each member of the senior staff is responsible for a component of the overall agency operation.

Paul F. Quirk
Executive Director

Daniel J. Kelly Deputy Director/ General Counsel

Philip D. Kett Chief Investment Officer

Elizabeth A. McLaughlin Director of Financial Operations

Lisbeth R. Poor Real Estate Officer Legal counsel
Mintz, Levin, Cohn, Ferrís, Glovsky & Popeo, P.C., Dr., Boston

Fund advisor Wilshire Associates, Santa Monica

Equity managers
Alliance Capital Management Corporation, New York City
Bear, Stearns & Co., New York City
The Boston Company Institutional Investors, Inc., Boston
Lazard Freres Asset Management, New York City
Trinity Investment Management Corp., Boston
United States Trust Co. of Boston, Boston

International equity managers
Baring International Asset Management, Ltd., London
N.M. Rothschild International Asset Management, Ltd., London
Schroeder Capital Management International Inc., London
Scudder, Stevens & Clark, New York
State Street Bank and Trust Company, Boston
Warburg Investment Management International, Ltd., London

Fixed income managers
Baring America Asset Management Company, Inc., Boston
Lehman Management Co., Inc., New York City
One Federal Asset Management, Inc., Boston
The Putnam Advisory Company, Inc., Boston
M.D. Sass Investors' Services, Inc., New York City

Real estate managers
Aldrich, Eastman & Waltch, Boston
Bank of Boston, Boston
Copley Real Estate Advisors, Inc., Boston
Heitman Advisory Corp., Chicago
JMB Institutional Realty Corporation, Chicago
John Hancock Mutual Life Insurance Co., Boston
The Lomas & Nettleton Advisory Group, Dallas
Massachusetts Mutual Life Insurance Co., Springfield
Trust Company of the West, Los Angeles

Venture capital managers
Davis Venture Partners, Tulsa
Forstmann Little & Co., New York City
John Hancock Venture Capital Management, Inc., Boston
Kohlberg, Kravis & Roberts and Co., New York City
Southern California Ventures II, San Diego
Venture Capital Fund of N.E., Boston
Vista Ventures, New Canaan

Independent public accountants Arthur Andersen & Co., Boston

Master trustee
State Street Bank and Trust Company, Boston

Design
Sametz Blackstone Associates, Boston
Photography
John Still, Boston
Typesetting
Monotype Composition, Boston
Printing
Reynolds-DeWalt Printing, New Bedford

Management Board
Boston, Massachusetts
617 439-4600

Pension Reserves



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PENSION

RESERVES

**INVESTMENT** 

TRUST

F U N D

This Annual Report is dedicated to the memory of T. Dustin "Dusty" Alward, a founding member of the PRIM Board, who died August 14, 1987.

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### Statement by the Chairman and Executive Director



The PRIM Board will continue to seek out sound and innovative investments for the Fund and is confident that its asset allocation strategy will continue to provide strong economic benefits to the Fund participants and the citizens of Massachusetts.

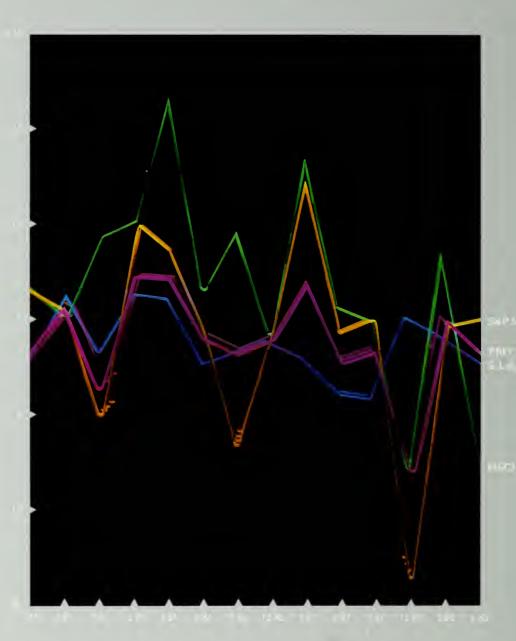
#### Overview

The quotation above is the closing sentence from last year's annual report. When those words were written few investors would have predicted the dramatic movements within the financial markets which were to take place during fiscal 1988. By the close of the year on June 30, the PRIT Fund, like investors worldwide, had experienced one of the most volatile periods in capital market history, with the Dow Jones Index breaking 2700 in August only to drop by more than 500 points in a single day on October 19, 1987.

The shockwaves from this event reverberated in financial markets around the world. Investors began to review their investment plans and asset allocation strategies to determine if market conditions warranted strategy changes.

At its inception over four years ago, the PRIM Board adopted an asset allocation strategy, which while aggressive as compared to most public funds, was comparable to most corporate funds. This allocation; 50% equities (40/10 domestic/international), 30% fixed income, 15% real estate and 5% alternative investments was chosen after much modelling in order to maximize returns within acceptable levels of risk. This policy was necessary in light of the substantial unfunded liabilities facing the State's retirement systems.

The investment plan worked well in the bull markets of 1985 and 1986. The PRIT Fund's annualized return for the three year period ending December 31, 1987 placed the fund in the top decile of the Massachusetts public funds universe. The investment strategy worked equally well during the market decline. As of December 31, 1987, the Fund had posted a positive return of 3.24%.



Comparative performance of major indices.

The benefits of diversification are clearly demonstrated when the PRIT Fund's performance since inception is compared to that of major market indices over the same period.



# Investment objectives

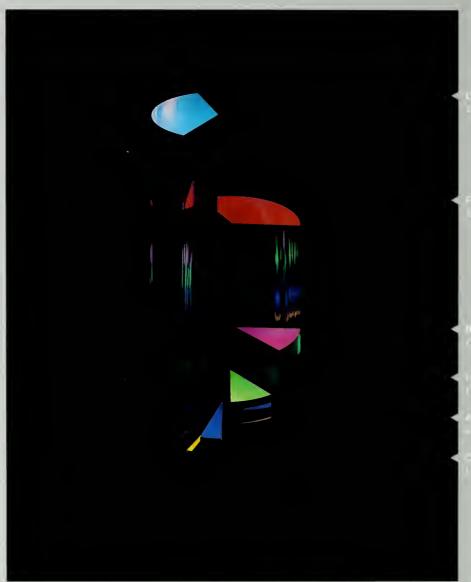
The cornerstone of PRIM's investment strategy is diversification both among and within asset classes where investment managers of differing styles and philosophies were selected. The ability to diversify broadly in this manner has been a major factor in PRIM's success.

The PRIM Board's primary objectives since inception have been to develop a long-term asset allocation strategy designed to maximize returns within acceptable levels of risk, to implement this strategy through a steady and orderly search and selection process and ultimately to obtain superior long-term returns.

PRIM's greatest strengths are: its broadly diversified portfolio and access to markets and products not available to institutional investors of lesser size, its willingness to research and invest in new and innovative investment products and services, and its realization of substantial returns to PRIT Fund participants on an annualized basis.

PRIM's first reactions to the events of October 19, 1987 were to reassure all PRIT Fund participants that the Fund had indeed survived the so-called "crash" in good order, largely due to the portfolio's broad diversification and global tilt. Despite the crash, the funding of new real estate and venture capital investments was completed by months-end as scheduled.

Simultaneously, PRIM's fund advisor, Wilshire Associates, conducted an in-depth analysis of the Fund's actual asset allocation in comparison to the more typical Massachusetts public fund portfolio which, as a rule, was (and is) more heavily weighted toward the fixed income asset class. Not surprisingly, it was determined that the risk profile of the PRIT Fund portfolio was not appreciably greater than that of the typical public fund, but did have significantly greater long-term return characteristics.



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Fund asset allocation.

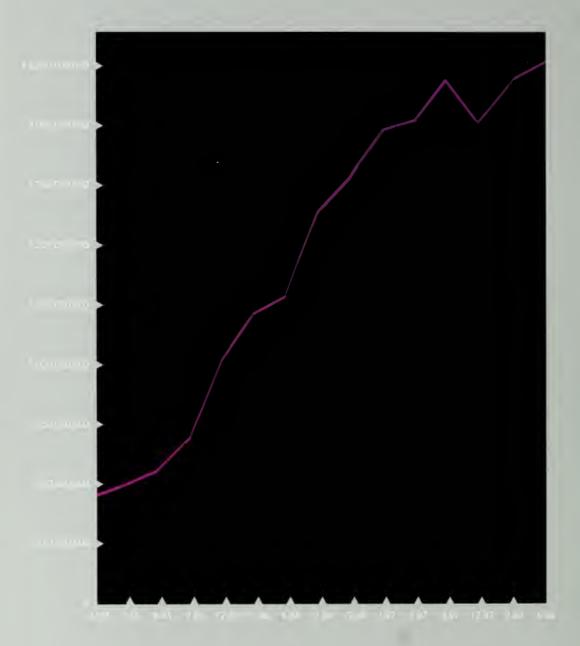
The ability to diversify among and within asset classes is the cornerstone of the Board's long-term investment strategy.



As a result of this study, the Board initiated a detailed review of its asset allocation policy. The purpose of this project was to review the Board's original strategy and investment decisions to determine whether or not any changes or enhancements to the asset allocation were desirable in light of the current market conditions. As part of the study new investment opportunities, products and services not available at the Fund's inception would be explored.

PRIM's original strategy had been to restructure its all-bond portfolio across all of the generally recognized asset classes using a combination of active and passive techniques. Wherever possible a core strategy was employed, the core product being an index fund (or its equivalent). This core would provide significant and broad market exposure within relatively short time frames, enhance returns and provide cost savings through lower management fees, minimal transaction costs and lower turnover. An array of active managers of differing styles were selected across each asset class to complement each other and provide diversification, thus enhancing returns and reducing overall risk.

In this report the Board's findings and some of the enhancements currently being undertaken will be outlined.



Growth in assets.

State contributions,
greater local participation, and investment
earnings have resulted
in a fivefold increase in
the Fund's size in the
three and one-half
years since inception.



### **Domestic equities**

Based on well known academic studies it is clear that a substantial component of any modern portfolio must be the equity asset class which provides the greatest long term return potential.

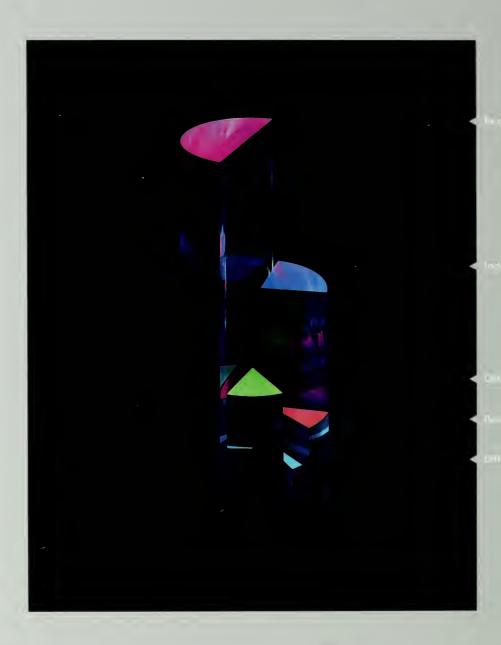
PRIM's first equity investment was a \$75 million South Africa Free S&P 500 index fund in February of 1985. Currently, that index fund totals \$315.9 million and represents 13.98% of the overall portfolio.

Indexing was only the first step in a much larger investment plan. Six active managers of varying styles were selected to complement the core index fund.

Since the equity allocation represented the single greatest concentration of assets within the portfolio, this segment was the first to be reviewed by the Board. At the end of calendar year 1987 the equity portfolio totalled \$720.7 million of which 47.6% was passively indexed with the remainder (\$373.7 million) actively managed.

Issues addressed included the appropriateness of contractual benchmarks based on individual manager styles, possible changes in the active/passive ratios, the addition of managers with different styles to the asset mix, and lastly, a review of new opportunities which were unavailable during the original portfolio structuring. Manager performance was also reviewed in detail.

As a result of the analysis a number of refinements were undertaken. It was determined that the small capitalization stock portfolio should be indexed in order to provide market returns at substantially reduced costs. The Board also authorized the establishment of an actively managed *growth* portfolio with a custom benchmark, thus reflecting a trend away from broad-based indices and toward benchmarks which more accurately reflect the performance of the sub-universe of stocks within which the particular style operates.



Diversification of the real estate portfolio.

A wide range of real estate investments, diversified both geographically and by property type, is represented in the Fund's real estate portfolio.



# International equities

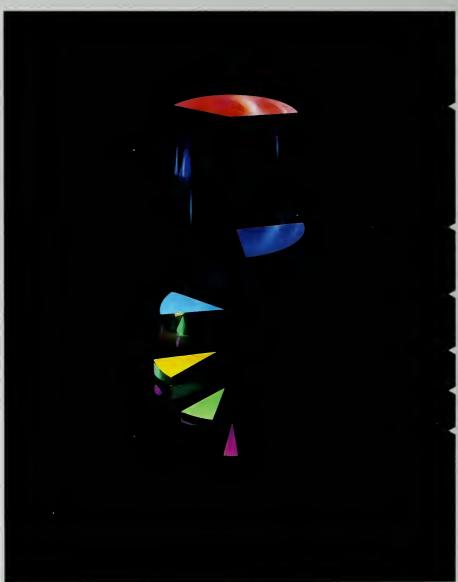
PRIM was one of the first public funds in the country to make a major commitment to international investments beginning in mid-1986. As of June 30, 1988, PRIM's international equity portfolio represented 11.2% of the PRIT Fund.

The expansion of the portfolio into international markets was in response to a growing trend toward a global economy. The opportunity to diversify out of the relatively efficient domestic equity markets and into the less efficient non-U.S. marketplace resulted in lower overall portfolio volatility (risk) and at the same time provided substantial returns. Additionally, as the PRIT Fund is South Africa Free, the move into the international marketplace served to substantially widen the equity universe beyond the limits imposed by that prohibition.

The success of this strategy became plain during calendar year 1987 when the most broadly utilized international index (MSCI EAFE) posted a return of 25.3% as compared to the S&P 500's return of 5.2%.

During the two years since PRIM made its international investments, the marketplace has seen a proliferation of new investment products and strategies. Most notable are the trends toward regional portfolios, and quantitative and specialty products such as small or large capitalization portfolios.

As part of the study, the Board and staff reviewed a number of these options in light of the current composition of the Fund's international portfolio and experience to date. Because the overall international portfolio had a bias away from the smaller capitalization portion of the marketplace, a small cap portfolio was structured in order to correct the imbalance. As cash flow permits, further refinements will be undertaken to include regional and quantitative portfolios.



Hetay 75%

Limited IV

Composition

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Permitten

The venture capital portfolio.

Venture capital
finances the creation
of new products and
companies. A broad
range of goods and
services is represented

in the venture capital portfolio.



#### Fixed income

When the PRIM Board began operations on October 1, 1984, the portfolio was primarily composed of fixed income instruments. The Board's first task was to begin to restructure and diversify away from the all-bond portfolio. A substantial portion of the portfolio was indexed and active managers representing various sub-specialities within the fixed income universe were arrayed around the core.

Analysis of this component of the Fund revealed that an area of the fixed income marketplace that had not been considered during the initial stages of the portfolio's construction was the non-U.S. markets.

The U.S. bond market represents only 48% of the world bond market. Thus, the decision to move a portion of the fixed income portfolio into international markets represents a logical expansion for the Fund. In general, the arguments which compelled similar moves on the equity side were applicable to fixed income markets as well. Major consideration was given to the issue of currency risk which can have a dramatic impact on portfolio returns.

Given PRIM's status as a long-term investor, it was determined that equity portfolios would not be hedged, since over relatively long time frames the impact of currency on returns is insignificant. On the fixed income side a different conclusion was reached. Since bond prices are more sensitive to movements in currency, PRIM's international fixed income managers do have the discretion to hedge currency risk as conditions warrant.

At the close of the fiscal year PRIM had commited 2.2% of the total portfolio to international fixed income. This decision reflects the Board's view that the prudent investor must be a participant in the globalization of the world economy, and not just a passive observer.



Participant profile.

The Town of Needham
has been a full participant in the Fund since
1985. Local retirement
systems also have the
option of purchasing
shares in the Fund.



#### Real estate

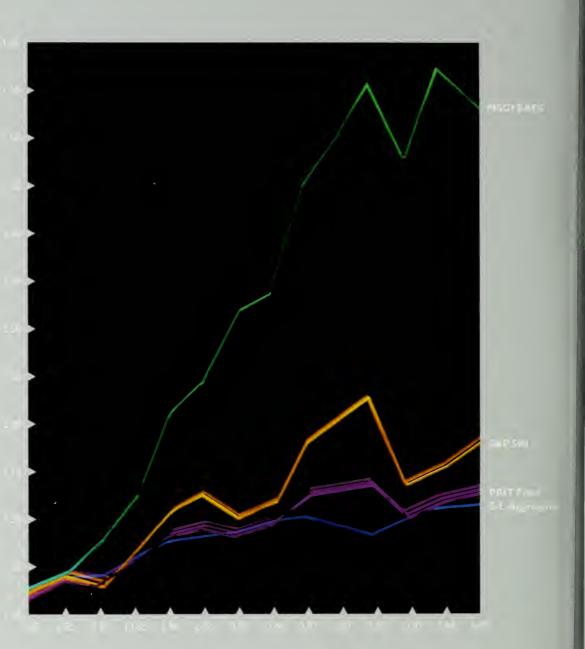
The PRIT Fund's first commitments to real estate were made in late 1985. These were investments in pooled funds (open and closed-end), again utilizing a core strategy.

As the Fund grew in size, it became clear that in order to achieve its asset allocation goal of 15% of portfolio, it would be necessary to move beyond participation in pooled funds and into separate account relationships. A portfolio of institutional quality real estate was developed, tailored to PRIM's goals and objectives, with substantially more flexibility and control than would be available in pooled fund vehicles. PRIM's separate account portfolio includes whole or partial ownership of 24 properties diversified geographically and by property type.

An initiative which the Board began over two years ago, the Massachusetts Housing Program, also came to fruition in fiscal 1988. This program finances the construction of multi-family rental housing in the Commonwealth and provides the Fund with a market rate of return on its investment. To date, more than 200 new units of multi-family housing have been created with more than twice that amount on the drawing board.

During fiscal 1988 an investment was made in a private placement real estate portfolio known as Cadillac Fairview. This is a package of high quality regional shopping centers and office/mixed-use projects in the United States and Canada. This investment provided excellent diversification opportunities as well as price advantage resulting from the purchase of an entire portfolio of existing properties which, if purchased separately, would have been more costly.

The review of this portion of the portfolio indicates that PRIM has moved rapidly beyond the traditional real estate investments found in most public fund portfolios and places greater emphasis on private market opportunities than is typical. PRIM will continue to seek out innovative investment opportunities and deal structures in order to further enhance the Fund's performance.



Growth of a dollar.

The growth of a single
dollar invested in each
of the major market
indices as compared to
the PRIT Fund graphically illustrates the
value of diversification
for the prudent
investor.



# Alternative investments

PRIM's allocation to alternative investments totals 5% of the portfolio. This allocation reflects the greater risk, longer holding period and lack of liquidity inherent in this asset class.

PRIM has further broken down this asset class into two sub-categories: venture capital which totals 1.7% and special equities which totals 2.7% of the portfolio.

The evolution of the investment strategy for these portfolios largely mirrors that of the real estate portfolio. Initially, relatively small investments were made in a number of partnerships. As the Fund grew in size, that strategy became unrealistic since it would be difficult to effectively monitor large numbers of partnerships.

During fiscal 1988, PRIM established a separate account venture capital portfolio known as the Mayflower Fund. The structure of the fund provides that 20% of the portfolio must be invested in companies based in Massachusetts.

While PRIM's venture capital investments are relatively new, none being more than three years old, the Board's detailed review indicates that substantial value will be realized as they mature.

PRIM's confidence in its leveraged buy-out investments, which make up the bulk of the special equities sub-class, has been amply rewarded. These investments, while still in their early stages, have already provided cumulative returns in excess of 20%.

The Board's commitment to private market opportunies has been reaffirmed with the approval of an additional investment in an onshore oil and gas partnership which will be funded over a six year period. This is the Board's second such venture. An earlier oil and gas partnership has already begun to provide significant returns.

#### Conclusion

The PRIM Board's commitment to explore new and unique investment opportunties has made its first four years a success for all of the Fund's participants. As long-term investors, the Board is committed to providing a stable framework of prudence and careful analysis from which to grow and evolve.

While the size of the Fund allows greater investment flexibility, it is the willingness of the Board to challenge itself that has made a critical difference to the Fund's performance.

Similarly, the continued support and confidence of the local retirement systems participating in the PRIT Fund, the members of both branches of the Massachusetts Legislature, and the Executive Branch, has been most helpful and is gratefully acknowledged.

Robert Q. Crane

Robert Q. Crane

Too F Suit

Treasurer

Paul F. Ouirk

**Executive Director** 



Pension Reserves
Investment Trust
Fund

Financial statements as of June 30, 1988 and June 30, 1987

#### **Balance** sheet

June 30

**Assets** 

Investments at market value (cost of \$2,172,510,547 and \$1,827,481,385 at June 30, 1988 and 1987, respectively. See *Schedule of investments*) (Note 2):

**Equities** 

U.S. Government agency and Treasury obligations

Fixed income investments

Money market investments

Real estate

Alternative investments

International investments

Total investments

Cash

Dividend and interest receivable (Note 2)

Receivable for investments sold

Other assets

**Total assets** 

Liabilities

Management fees payable (Note 3)

Payable for investments purchased

Other liabilities

**Total liabilities** 

Commitments and

contingencies

(Note 5)

Net assets

Fund units (1,928,510,743 and 1,643,682,393 Capital Fund units outstanding at June 30, 1988 and 1987, respectively, and 13,536,966 and 1,987,821 Cash Fund units outstanding at June 30, 1988 and 1987, respectively) (Notes I and 2)

Net unrealized gain on investments

**Total net assets** (equivalent to \$1.16 and \$1.23 per Capital Fund unit based on 1,928,510,743 and 1,643,682,393 units outstanding at June 30, 1988 and 1987, respectively, and \$1.00 per Cash Fund unit based on 13,536,966 and 1,987,821 units outstanding at June 30, 1988 and 1987, respectively)

The accompanying notes are an integral part of these financial statements.



1987	1988		
Total	Total	Capital Fund	Cash Fund
\$ 874,524,957	\$ 819,288,920	\$ 819,288,920	\$ —
490,964,626	456,454,217	456,454,217	_
182,927,846	191,201,285	191,201,285	_
86,287,544	160,788,090	147,252,882	13,535,208
124,998,975	297,868,841	297,868,841	_
39,619,977	97,440,112	97,440,112	_
254,663,130	255,307,061	255,307,061	_
\$2,053,987,055	\$2,278,348,526	\$2,264,813,318	\$13,535,208
51,487	733	_	733
18,061,442	20,624,216	20,592,305	31,911
17,708,038	36,958,992	36,958,992	_
19,836	21,100	21,100	_
\$2,089,827,858	\$2,335,953,567	\$2,322,385,715	\$13,567,852
\$ 948,000	\$ 58,840	\$ 58,840	\$ —
43,543,268	60,071,697	60,071,697	
15,691,256	15,745,326	15,714,440	30,886
\$ 60,182,524	\$ 75,875,863	\$ 75,844,977	\$ 30,886
\$1,803,139,664 226,505,670	\$2,154,239,725 105,837,979	\$2,140,702,759 105,837,979	\$13,536,966 ————

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\$13,536,966

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**\$2,246,540,738 \$2,260,077,704** 

\$2,029,645,334

## Statement of operations

For the years ended June 30

Investment income

Interest

Dividends

Real estate income

Alternative investment income

Security lending income (Note 6)

Total investment income

Less: Management fees (Note 3)

Less: Interest expense

Net investment income

Realized and

unrealized gain on

investments

Realized gain on investments

Increase (decrease) in unrealized gain on investments

Net gain (loss) on investments

State appropriations

(Note I)

Total

Increase in net assets resulting

from operations

The accompanying notes are an integral part of these financial statements.



		1988	1987
Cash Fund	Capital Fund	Total	Total
\$ 368,096	\$ 72,689,070	\$ 73,057,166	\$ 64,603,754
	32,797,756	32,797,756	25,853,804
_	17,561,152	17,561,152	5,282,532
_	3,271,840	3,271,840	_
_	257,242	257,242	216,434
\$ 368,096	\$126,577,060	\$126,945,156	\$ 95,956,524
	11,043,742	11,043,742	6,619,313
-	1,567,500	1,567,500	262,934
\$ 368,096	\$113,965,818	\$114,333,914	\$ 89,074,277
\$ <b>–</b>	\$ 26,457,247	\$ 26,457,247	\$ 82,239,420
_	(120,667,693)	(120,667,693)	59,406,623
\$ —	\$ (94,210,446)	\$(94,210,446)	\$141,646,043
\$ <u> </u>	\$ 25,000,000	\$ 25,000,000	\$ 23,900,000
\$ 368,096	\$ 44,755,372	\$ 45,123,468	\$254,620,320

## Statement of changes in net assets

For the years ended June 30

From operations	Net investment income				
	Realized gain on investments				
	Increase (decrease) in unrealized gain on investments				
	State appropriations (Note 1)				
	Increase in net assets resulting from operations				
Distributions to	Net investment income				
member systems	Realized gain on investments				
from	State appropriations				
	Total distributions to member systems				
From fund unit	Proceeds from original unit sales				
transactions	Proceeds from subsequent unit sales				
	Net asset value of units issued to member systems in reinvestment of net				
	investment income, realized gain and state appropriations				
	Cost of units repurchased				
	Interfund transfers				
	Increase (decrease) in net assets derived from fund unit				
	transactions				
Net assets	Total increase (decrease) in net assets				
	Beginning of period				
	End of period				

The accompanying notes are an integral part of these financial statements.



١			1988	1987
ı	Cash Fund	Capital Fund	Total	Total
	\$ 368,096	\$ 113,965,818	\$ 114,333,914	\$ 89,074,277
	_	26,457,247	26,457,247	82,239,420
1	_	(120,667,693)	(120,667,693)	59,406,623
ı	\$ 368,096	\$ 19,755,372	\$ 20,123,468	\$ 230,720,320
١	_	25,000,000	25,000,000	23,900,000
l	\$ 368,096	\$ 44,755,372	\$ 45,123,468	\$ 254,620,320
	\$ (368,096)	\$ (113,965,818)	\$ (114,333,914)	\$ (89,074,277)
	_	(26,457,247)	(26,457,247)	(82,239,420)
		(25,000,000)	(25,000,000)	(23,900,000)
	\$ (368,096)	\$ (165,423,065)	\$ (165,791,161)	\$ (195,213,697)
	\$ 2,229,492	\$ 15,103,545	\$ 17,333,037	\$ 33,666,631
	58,053,594	146,497,963	204,551,557	461,425,137
	368,096	165,423,065	165,791,161	191,213,697
	(35,130,692)	(1,445,000)	(36,575,692)	(30,198,050)
	(13,971,345)	13,971,345		
	\$11,549,145	\$ 339,550,918	\$ 351,100,063	\$ 660,107,415
-	\$11,549,145	\$ 218,883,225	\$ 230,432,370	\$ 719,514,038
	1,987,821	2,027,657,513	2,029,645,334	1,310,131,296
	\$13,536,966	\$2,246,540,738	\$2,260,077,704	\$2,029,645,334
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# Pension Reserves Investment Trust Fund Notes to financial statements

June 30, 1988

Note I:
Description of the
Pension Reserves
Investment
Trust Fund

The Pension Reserves Investment Trust Fund (PRIT) was created in 1984 by the Commonwealth of Massachusetts through legislation (Chapter 661 of the Acts of 1983) and is the investment portfolio for the assets of member state and local retirement systems. The Pension Reserves Investment Management Board (the Board) was created by the same legislation to manage PRIT. Operations of PRIT began October 1, 1984.

Systems joining PRIT have the option to be Participating or Purchasing Systems. During the year ended June 30, 1988, four systems entered PRIT as Participating Systems and five entered as Purchasing Systems, bringing the total number of Participating and Purchasing Systems to 17 and 10, respectively. Participating Systems must transfer all of their retirement system assets to PRIT. Those systems qualifying as Participating Systems shared in the annual appropriation made to PRIT by the Commonwealth of Massachusetts based on the Participating System's net assets in PRIT at the beginning of the fiscal year. In fiscal 1988, all Participating Systems joining on or before July 1, 1987 shared in the Commonwealth's fiscal 1988 appropriation which totaled \$25 million. Purchasing Systems, along with the Participating Systems, share in the investment earnings of PRIT based on their proportionate share of net assets (see Note 2).

PRIT consists of two funds, the Capital Fund and the Cash Fund. The Capital Fund serves as the long-term asset portfolio. The portfolio asset allocation plan includes stocks, bonds, money market investments, international investments, real estate and other alternative investments. The Cash Fund consists of short-term investments which are used to meet the liquidity requirements of the various Participating and Purchasing Systems.

Note 2: Summary of significant accounting policies The following is a summary of significant accounting policies followed by PRIT, which are in conformity with those generally accepted in the investment company industry.

Valuation of investments Security transactions are recorded on the trade date of the securities purchased or sold. The cost of a security is the purchase price or, in the case of assets transferred to PRIT by a new system, the market value of the securities on the transfer date. The Capital Fund is valued at monthend, while the Cash Fund is valued daily.

Investments in bonds and U.S. Government agency and Treasury obligations are valued by an independent pricing service. In determining the price, the service reflects such factors as security prices, yields, maturities and ratings, supplemented by dealer quotations. Money market and other short-term investments, both domestic and international, are recorded using the amortized cost method, which approximates market value. Domestic and international investments in equity securities traded on national securities exchanges are valued at the last sale price or, if no sale, at the closing bid price. Securities traded on any other exchange are valued in the same manner or, if not so traded, on the basis of closing over-the-counter bid prices. Investments in real estate are valued by the real estate investment managers at estimated market values as of June 30, 1988.



Alternative investments include venture capital, leveraged buyouts, private placements and other investments where the structure, risk profile and return potential differ from traditional equity and fixed income investments. These investments are valued at fair value, as determined in good faith by the Board, since there are no market quotes available. All alternative investments are stated at cost, which approximates fair value, until significant subsequent events require a change.

Dividend income is recorded on the ex-dividend date and interest income is recorded when earned.

Gains and losses from sales of investments are calculated on the average cost method.

#### **Fund units**

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tments, ethod, ets in e last other of 1 by the 0, 1988. Capital Fund: The number of units resulting from the initial transfer of a retirement system's assets to PRIT or from the subsequent sales or repurchases of units is calculated by dividing the market value of the assets involved by the unit price at the end of the month.

Net investment income and net realized gains are reinvested in units at the end of each month as follows:

- Net investment income and net realized gains for the month are allocated between the systems based on their proportionate share of the net assets at the beginning of the month.
- The allocated portions are then divided by the beginning-of-the-month unit price, adjusted for the change in unrealized appreciation (depreciation) of investments during the current month, to determine each system's incremental number of units.
- If the Capital Fund incurs net realized losses, the losses are allocated between
  the systems using the same method as for gains, thereby reducing the number of
  units held by each system.

Cash Fund: Sales and repurchases of units by the systems are recorded in the Cash Fund on the trade date at the fund's daily price of \$1.00 per unit. Net investment income is allocated daily between the systems based on their proportionate share of net assets and is reinvested in units at monthend.

# Note 3: Management fees

In accordance with the Board's Operating Trust, all expenses incurred by the Board in managing PRIT are charged to PRIT in the form of management fees. These fees primarily consist of investment manager, consultant, custodian and professional fees, salaries and other operating expenses of the Board.

**Investment managers** Investment manager fees are based on a fixed percentage of net assets under management, except for a few managers whose compensation is based on performance. Investment manager fees totaled approximately \$7,563,000 and \$4,096,100 for the years ended June 30, 1988 and 1987, respectively.

Investment consultant Wilshire Associates (Wilshire) serves as the pension investment consultant for the Board. Wilshire provides comprehensive pension investment consulting services, including recommendations on asset allocation, development of objectives, policies and guidelines for the Board and for the individual investment managers selected by the Board, assistance in the screening, interviewing and selection of investment managers, and measurement of external and internal performance of PRIT and the individual investment managers. Wilshire received fees of approximately \$228,100 and \$183,400 for the years ended June 30, 1988 and 1987, respectively.

Investment custodian State Street Bank and Trust Company (State Street) is the PRIT investment custodian and recordkeeper. State Street records all daily transactions for PRIT, including investment sales and purchases, investment income, expenses incurred by PRIT and all fund unit activity for the PRIT member systems. State Street also provides portfolio performance analysis. State Street receives an annual asset fee based on the market value of PRIT.

State Street's compensation totaled approximately \$1,024,900 and \$897,800 for the years ended June 30, 1988 and 1987, respectively.

### Note 4: Purchases and sales of investments

During the year ended June 30, 1988, the cost of investments purchased and the proceeds from investments sold, excluding temporary investments, were \$3,723,154,144 and \$3,405,357,616, respectively. During the year ended June 30, 1987, the cost of investments purchased and the proceeds from investments sold, excluding temporary investments, were \$3,448,292,760 and \$2,841,536,503, respectively.



Note 5: Commitments and contingencies

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As of June 30, 1988, PRIT had outstanding commitments to invest \$90.3 million in real estate and \$217.5 million in alternative investments.

Note 6: Security lending program In fiscal 1987, PRIT joined State Street's security lending program. Under this program, PRIT receives a fee for allowing brokerage firms to borrow certain of its securities for a predetermined period of time, securing such loans with collateral consisting of cash or securities issued or guaranteed by the U.S. Government equaling 102% of the market value of the securities borrowed. All collateral is held by State Street. At June 30, 1988, the market value of securities on loan was approximately \$31 million for equities, \$7 million for fixed income investments and \$33 million for U.S. Government agency and Treasury obligations. These securities are included in investments at market value as of June 30, 1988 in the accompanying balance sheet.

# Pension Reserves Investment Trust Fund Schedule of investments\* as of June 30, 1988

				Market
Shares		Cost		value
	Equities			
2,102,080	Basic industries	\$ 66,414,614	\$	79,846,282
1,723,779	Capital goods	49,345,647		57,179,318
213,500	Conglomerates	10,973,756		11,028,627
2,712,940	Consumer basics	73,275,134	ŀ	88,954,310
1,069,000	Consumer durable goods	33,594,140		36,275,850
2,275,839	Consumer nondurables	63,046,626		70,263,380
1,155,808	Consumer services	33,523,379	)	38,565,506
1,487,687	Energy	54,387,040		59,594,717
2,776,235	Finance	83,177,142	2	82,467,377
1,260,648	General business	39,469,560	)	45,004,566
454,670	Shelter	9,777,606	•	11,868,124
2,225,785	Technology	95,356,428		96,110,676
712,450	Transportation	24,244,138		24,246,787
3,618,168	Utilities	98,499,517		113,063,052
218,500	Miscellaneous	4,861,088	3	4,820,348
·	Total equities	\$ 739,945,815		
	·			
	Alternative investments Funds with investment manag invested in: Investments in nonpublic securities: Equities Debt  Cash, cash equivalents and Treasury obligations Publicly traded equities Other Total alternative investments	\$ 45,743,624 31,454,54 \$ 77,198,165 16,734,744 3,179,654 303,544 \$ 97,416,111	5 \$ 9 4 4	45,743,624 31,478,541 77,222,165 16,734,749 3,179,654 303,544 97,440,112
	Money market investments State Street Short-term Investment Fund Certificates of deposit Massachusetts Municipal Depository Trust Total money market investments	\$ 145,368,206 14,184,674 1,235,206 \$ 160,788,096	8 _	145,368,208 14,184,674 1,235,208

See Note 2
 The accompanying notes are an integral part of these financial statements.



Principal					Market
amount			Cost		value
	Real estate				
	Retail	\$	145,340,678	\$	148,934,421
	Industrial		69,763,525		71,488,522
	Office		46,509,017		47,659,015
	Residential	_	29,068,136		29,786,883
	Total real estate	\$	290,681,356	\$	297,868,841
	Fixed income investments				
\$104,350,144	Corporate bonds with rates ranging from 4.50% to 16.00% and maturities				
	ranging 1989 to 2018	\$	94,721,052	\$	89,404,723
49,381,000	Utilities with rates ranging from 3.00% to 14.00% and maturities ranging from	•	71,721,032	*	07, 10 1,7 23
1,000,000	1988 to 2026 Municipals with a rate of		43,918,834		43,495,655
717,833	8.50% and maturing in 1992 Insurance contracts with		1,000,000		968,050
	variable rates and maturities ranging from 1990 to 1993		654,500		654,500
54,316,039	Savings and Loans with rates ranging from 6.75% to 15.625% and maturities ranging from 1989 to 2017		53,099,813		52,527,232
5,025,000	Miscellaneous with rates ranging from 11.75% to 16.50% and maturities		33,077,013		32,327,232
	ranging from 1995 to 2007  Total fixed income	_	3,878,991	_	4,151,125
	investments	\$	197,273,190	\$	191,201,285
	U.S. Government agency				
\$ 5,078	and Treasury obligations, Farmers Home Administration Insured Notes with a rate of 9.875%				
29,730,000	and maturing in 1989 Federal Farm Credit Banks with rates ranging from	\$	5,059	\$	3,793
	7.55% to 14.10% and maturities ranging from 1988 to 1993		31,277,920		31,354,345
11,200,000	Federal Home Loan Banks with rates ranging from 10.20% to 12.50% and		, , , , , ,		
	maturities ranging from				

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3,624 3,541 2,165

4,749 9,654 3,544

0,112

8,208 4,674

5,208

18,090

Principal amount		Cost	Market value
amount	U.S. Government agency		value
\$ 5,203,613	and Treasury obligations, of Federal Home Loan Pools with rates ranging from 6.25% to 8.75% and maturities ranging from 2000 to 2003	\$ 5,043,496	\$ 4,821,801
46,328,643	Federal National Mortgage Association with rates ranging from 5.00% to 11.75% and maturities		
1,000,000	ranging from 1988 to 2018 General Services Administration with a rate of	42,281,687	42,512,895
64,990,715	7.125% and maturing in 2002 Government National Mortgage Association with	871,880	892,500
5,000,000	rates ranging from 7.00% to 16.00% and maturities ranging from 2000 to 2099 MBNA Credit Card with a	62,768,903	62,263,473
91,873	rate of 8.60% and maturing in 1993 Small Business Administration	4,980,000	4,956,250
4,000,000	with a rate of 9.875% and a maturity of 1993 Student Loan Marketing	91,873	91,873
	Association with rates ranging from 8.45% to 10.90% and maturities in 1990	4,206,219	4,123,130
76,300,000	United States Treasury Bonds with rates ranging from 8.75% to 13.25% and maturities ranging from 1995 to 2018	87,659,991	88,056,410
1,000,000	United States Treasury Certificates with variable rates and maturing in 1992	732,580	737,050
197,210,000	United States Treasury Notes with rates ranging from 6.375% to 14.25% and	732,300	757,050
9,205,000	maturities ranging from 1989 to 1998 United States Treasury Securities with variable	202,638,318	198,328,710
	rates and maturities ranging from 1991 to 1996  Total U.S. Government	4,241,094	6,186,848
	agency and Treasury obligations	\$ 457,816,520	\$ 456,454,217



					Market
Units			Cost		value
	International investments				
1 070 / 50	Equities Basic industries	\$	19,418,385	\$	22,772,108
1,979,659		Þ	23,370,246	Ф	27,368,233
1,168,891	Consumer basics				
312,433	Consumer durable goods		6,537,139		6,788,29
767,794	Capital goods		14,622,993		17,801,950
802,601	Consumer nondurables		18,022,748		17,800,57
763,400	Consumer services		6,562,029		6,690,390
498,500	Energy		2,593,262		3,098,99
2,537,931	Finance		35,723,089		38,455,85
917,150	General business		14,130,314		16,200,72
532,255	Shelter		6,360,585		8,403,02
816,065	Technology		15,129,649		16,656,81
438,000	Transportation		6,293,531		7,164,28
1,310,741	Utilities		6,833,514		8,209,68
5,447,059	Miscellaneous		21,560,659		27,123,26
	Total equities	\$	197,158,143	\$	224,534,19
	Foreign government Treasury obligations Netherland Treasury Notes with rates ranging from				
	6.25% to 6.375% and				
	maturities from				
	1995 to 1997	\$	2,315,509	\$	2,059,16
	United Kingdom Treasury				
	Notes at 8.50% due in 2000 France Treasury Notes		2,576,288		2,355,00
	at 10% due in 2000		2,348,171		2,200,69
	Canada Treasury Notes				
	at 9.75% due in 1997	_	1,426,411	_	1,503,21
	Fixed income investments Convertible bonds with a rate of 1.70% and due in 1997	\$	699,695	\$	625,54
	Money market investments				
	Money market investments Various foreign cash and				
	cash equivalents	¢	22 029 247	•	22.020.27
	casirequivalents	\$	22,029,247	\$	22,029,24
	Total international				
	investments	\$	228,589,464	\$	255,307,06
		4	120,007, 101	-	200,007,00
	Total investments	\$2	2,172,510,547	\$	2,278,348,52
	*See Note 2				

<sup>\*</sup>See Note 2

891

,473

,250

,873

3,130

6,410

7,050

28.710

86,848

54,217

Note: A detailed portfolio listing is available for review at the Pension Reserves Investment Management Board's office.

The accompanying notes are an integral part of these financial statements.

#### **Pension Reserves Investment Trust Fund**



Report of the independent public accountants

To the Pension Reserves Investment Management Board and Member Systems of the Pension Reserves Investment Trust Fund:

We have audited the accompanying balance sheet of the Pension Reserves Investment Trust Fund (a statutorily created entity established by the Commonwealth of Massachusetts with the enactment of Chapter 661 of the Acts of 1983), including the schedule of investments, as of June 30, 1988 and 1987 and the related statements of operations and changes in net assets for the years then ended. These financial statements are the responsibility of the Fund's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. Our procedures included confirmation of securities owned as of June 30, 1988 and 1987, by correspondence with the custodian. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Pension Reserves Investment Trust Fund as of June 30, 1988 and 1987, and the results of its operations and the changes in its net assets for the years then ended, in conformity with generally accepted accounting principles.

As discussed in Note 2 to the financial statements, independent market values of real estate and alternative investments are not readily available. Real estate investments are included in the balance sheet at estimated market values determined by the real estate managers, and the alternative investments are valued at fair value, as determined in good faith by the Board.

arthur Civileisen a Co

August 19, 1988.

The members of the Pension Reserves Investment Management Board consist of designated representatives of the Governor and the State Treasurer, as well as elected and appointed representatives of state, county and municipal employees. By law, one member must be a private citizen experienced in the field of investment or financial management, one must be a person who is not an employee or officer of the Commonwealth, two must be representatives of employee organizations, two must be elected by state employees and teachers, and one must be the Commissioner of Public **Employee Retirement** Administration. Members serve without compensation.

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Robert Q. Crane, Chairman, is the Treasurer of the Commonwealth of Massachusetts. Ex-officio member.

Joseph Bonavita,

appointed by the State Treasurer, is Executive Director of the American Federation of State, County and Municipal Employees, Council 93, AFL-CIO. Term expires 4/27/92.

Robert Brousseau, elected by the members of the State Teachers' Retirement System, is a teacher in the Wareham public schools. Term expires 7/20/90.

Arthur J. Gutierrez, appointed by the State Treasurer, is President of The Gutierrez Company, a real estate development firm, located in Burlington, Massachusetts. Term expires 6/5/89.

William Jones, appointed by the Governor, is the Executive Director of the Codman Square Housing Development Corporation. Term expires 2/1/92.

Paul M. Lestage, appointed by the Governor, is the Secretary/Treasurer of the Professional Firefighters of Massachusetts. Term expires 3/30/91. John J. McGlynn, Vice Chairman, is the Commissioner of the Division of Public Employee Retirement Administration. Ex-officio member.

**B.J. Rudman**, a designee of the Governor, is Assistant Secretary for Management, Executive Office for Administration and Finance. Ex-officio member.

Ralph W. White, elected by the members of the State Retirement System, is President of the Retired State, County and Municipal Employees Association of Massachusetts. Term expires 7/20/90.

#### **Pension Reserves Investment Management Board**

The PRIM Board's offices are located at 200 State Street, Boston. The staff is comprised of professionals and support personnel with qualifications in the fields of finance, modern portfolio management, law, business administration, accounting, and retirement board administration. Each member of the senior staff is responsible for a component of the overall agency operation.

Paul F. Quirk
Executive Director

Daniel J. Kelly Deputy Director/ General Counsel

Philip D. Kett Chief Investment Officer

Elizabeth A. McLaughlin Director of Finance

Lisbeth R. Poor Real Estate Officer Legal counsel Mintz, Levin, Cohn, Ferris, Glovsky & Popeo, P.C., Dr., Boston

Fund advisor
Wilshire Associates, Santa Monica

Equity managers
Alliance Capital Management Corporation, New York City
Bear, Stearns & Co., New York City
The Boston Company Institutional Investors, Inc., Boston
Lazard Freres Asset Management, New York City
Trinity Investment Management Corp., Boston
United States Trust Co. of Boston, Boston

Fixed income managers
Baring America Asset Management Company, Inc., Boston
Lehman Management Co., Inc., New York City
One Federal Asset Management, Inc., Boston
The Putnam Advisory Company, Inc., Boston
M.D. Sass Investors' Services, Inc., New York City

International managers
Baring International Asset Management, Ltd., London
N.M. Rothschild International Asset Management, Ltd., London
Schroder Capital Management International Inc., London
Scudder, Stevens & Clark, New York
State Street Bank and Trust Company, Boston

Real estate managers
Aldrich, Eastman & Waltch, Boston
Bank of Boston, Boston
Copley Real Estate Advisors, Inc., Boston
Heitman Advisory Corp., Chicago
JMB Institutional Realty Corporation, Chicago
John Hancock Mutual Life Insurance Co., Boston
The Lomas & Nettleton Advisory Group, Dallas
Massachusetts Mutual Life Insurance Co., Springfield
Trust Company of the West, Los Angeles

Venture capital managers
Advent International Corp., Boston
Alan Patricof Associates, London
Davis Venture Partners, Tulsa
Forstmann Little & Co., New York City
Golder, Thoma and Cressey, Chicago
John Hancock Venture Capital Management, Inc., Boston
Kohlberg, Kravis & Roberts and Co., New York City
Southern California Ventures II, San Diego
TA Associates, Boston
Venture Capital Fund of N.E., Boston
Vista Ventures, New Canaan

Independent public accountants
Arthur Andersen & Co., Boston

Master trustee
State Street Bank and Trust Company, Boston

Design and photography
Sametz Blackstone Associates, Boston
Typesetting
Monotype Composition, Boston
Printing
Reynolds-DeWalt Printing, New Bedford



Pension Reserves Investment Management Board

Boston, Massachusetts 617 439-4600



Annual report for the year ended June 30, 1989

PENSION

RESERVES

**INVESTMENT** 

TRUST

F U N D

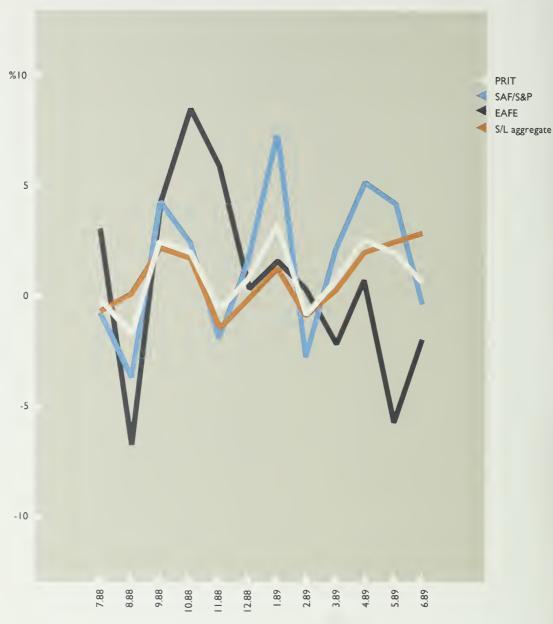


#### Overview

As the decade of the 1980s ends, the Pension Reserves Investment Board (PRIM) concludes its fifth year of operations. During this period the character of public pension fund management in Massachusetts has changed dramatically. Internally managed "legal list" portfolios have all but been eliminated, replaced by portfolios managed by outside investment professionals. PRIM is pleased to have been both a catalyst for, and in the forefront of such change.

World financial markets have also changed dramatically. The past five years (and indeed most of the past decade) have been marked by one of the longest periods of financial growth in history, not only in the United States, but in Europe and Asia as well. It was against this backdrop of sustained expansion that PRIM began operations, developing an aggressive, long-term asset allocation strategy for the PRIT Fund. The goal of this strategy is to reduce the Commonwealth's unfunded pension liabilities and provide security in retirement for public employees.

This report reflects on some of these changes and highlights the ways in which PRIM has positioned itself for the decade ahead.



Do

Comparative perfor-

mance of indices.

The benefits of diver-

sification are clear

when the PRIT Fund's

performance is

compared to that of

major market indices

over the same period.



#### Domestic markets

At the close of trading on June 30, 1985, the Dow Jones stood at 1335.46. Four years later on the same date the index stood at 2440.06. This period included both record highs and the largest one-day decline in history, the loss of more than 500 points on October 19, 1987.

The reasons for this bull market—and for interim volatility during the period—are many. Notable factors include: corporate merger and acquisition (M&A) and leveraged buyout (LBO) activity; an influx of foreign investors; the introduction of sophisticated computerized trading techniques; the use of futures and options; and a wide range of geopolitical factors. All this resulted in an undercurrent of investment-related euphoria and a belief that the market would only move in one direction—up.

The stock market was not the only domestic financial market that enjoyed spectacular growth during this period; bond markets were also expanding. On June 30, 1985, mortgage-backed securities made up approximately 18% of the publicly traded fixed-income universe; four years later their share of that market stood at almost 25%. Sparked by LBO and M&A activity, the so-called "high yield" market expanded by almost 33% during this same period.

LBO activity, a phenomenon of the late 1970s, grew steadily throughout the decade, reaching its apex with the buyout of RJR Nabisco for \$23 billion in 1988. But buyout activity was not limited to highly publicized deals. In 1981, some 99 LBO transactions were completed; over the next seven years, this number rose to 318.

Equities, 44% Cash, 8% Fixed income, 48%

Domestic equities, 41.2%

International equities, 10.4%

Cash equivalents, 1 s Alternate investments, 2% Real estate, 12.8%

International fixed, 2%

Domestic fixed, 30.2%

11.85

Fund asset allocation.

Over the last five

years, the Board has

continued to diversify

among and within

asset classes, adding

substantial interna-

tional and alternative

investments to

improve returns and

minimize risk.

Α

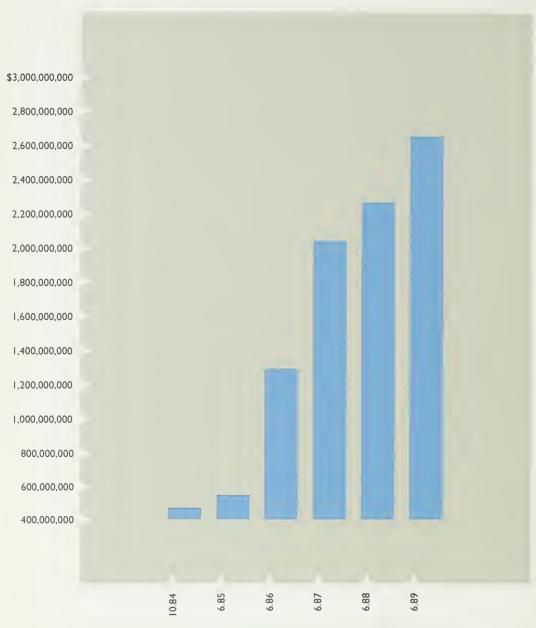


1989 saw LBO activity begin to wane as investors started to question the use of junk bonds for highly leveraged acquisitions, and as prices for target companies continued to increase. Additionally, the spectre of government intervention aimed at regulating LBO activity, the necessity of a bailout of the savings and loan (S&L) industry, and fears of an economic slowdown—which could trigger serious financial difficulties for highly leveraged private companies—also served to slow the pace of LBO activity.

Expansion and change were the hallmark of another asset class, real estate, during the latter half of the 1980s. Institutional investors, particularly public pension funds, became a source of capital as they began to diversify their traditional portfolios into real estate. The Tax Reform Act of 1984, changes in S&L regulations, and the emerging wealth created in the stock market provided additional capital.

The high-tech boom of the late 1970s and early 1980s, increases in defense spending, growth in the financial services industry, and the regionalization of banking increased demand for rental space in much of the country. That demand in turn reshaped demographic patterns, which, coupled with abundant capital, fueled new construction at a rapid pace.

The net result of all this activity was overbuilding. In the Southwest, several factors, including the drop in oil prices and a disparity between demographic projections and actual demand, produced tremendous oversupply and a decline in the value of real estate portfolios.



Growth in assets.

State contributions,
greater local participation, and investment earnings have
produced a sixfold
increase in the Fund's
size in the four and a

half years since

inception.

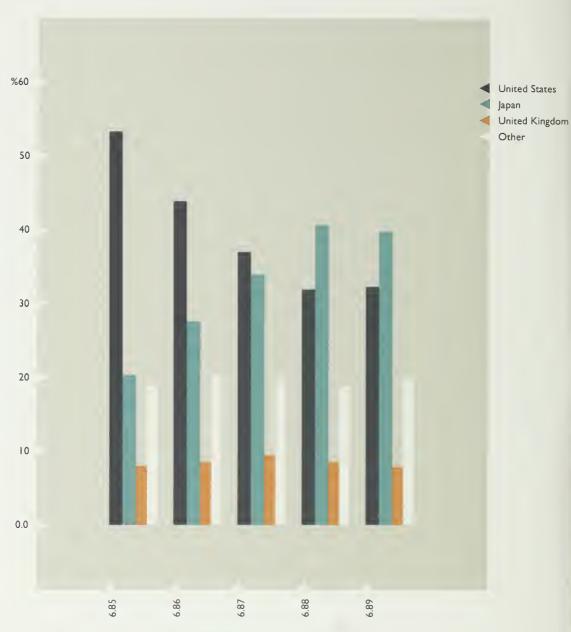


Recovery in the Southwest had begun as the decade ended.

Construction had slowed, and empty space was absorbed by new industry drawn to the region by lower real estate costs, cheaper rents, and abundant labor. Conversely, in the Northeast, which had escaped the early excesses experienced elsewhere, oversupply became an issue because previously pent-up demand had largely been absorbed.

Another asset class, venture capital, experienced enormous capital inflows. Again, the primary source of new funds was institutional investors seeking to diversify portfolios and drawn by the potential for high returns. During the period 1983-1987, the annual pool of capital available for investment averaged \$4 billion. Many new venture capital partnerships were formed, resulting in a large number of less experienced entrepreneurs ready to invest in companies and ideas. Spurred by a seemingly endless bull market, company prices rose, but returns did not. While reliable industry-wide data are difficult to assemble, it seems clear that returns in the mid- to late 1980s are below the annualized 20% rate of return expected by most institutional investors.

Since 1987, less money has been available for venture capital investment. Experienced venture capital firms are raising less money, and less experienced, less successful partnerships are having difficulty finding investors at all.



Int

Relative weightings of

world equity markets.

Over five years there

have been significant

changes in the relative

sizes of the world's

equity markets-

further evidence of the

trend toward a global

economy.



## International markets

During the 1980s, domestic investors in search of new ways to add value began to look abroad for opportunity, placing increasing amounts of money in foreign equity and fixed-income markets.

These investments were initially confined to index funds and separate account relationships in a market dominated by British merchant banks. In 1985 some 55 investment managers were managing approximately \$27 billion in non-U.S. assets for tax-exempt institutional investors in the United States. By 1989, over 100 firms were managing assets in excess of \$70 billion.

The growth in this market has not been confined to the amount of assets under management or to the absolute number of investment management firms. Substantial diversity now exists in both style and products, with specialized indexing, emerging markets funds, regional strategies, and quantitative products all available to investors.

Investors have also begun to move into other asset classes on an international basis, notably real estate, venture capital, and buyout transactions. Much of this activity has occurred in Europe, which has benefitted from structural changes in tax laws and from anticipation of 1992, when most trade barriers will be abolished.

Capital is also flowing from domestic investors to the Pacific rim, as investors search for undervalued companies and the promise of high returns. Equity markets in Korea, Taiwan, Malaysia, and Thailand are beginning to capture the attention of institutional investors anxious to capitalize on the burgeoning economies of these countries.



Australia
Austria
Belgium
Denmark
France
Germany
Hong Kong
Italy
Japan
Netherlands
Norway
Singapore/Malaysia
Spain
Sweeden
Switzerland
United Kingdom
United States
Canada
Mexico

PRIM as a global

investor.

Diversification into non-U.S. markets provides opportunities unavailable to small institutional investors, lowers the portfolio's overall risk profile, and improves returns.



Fueled by liquidity in their domestic markets, Japanese investments in the United States have grown rapidly. As their knowledge of the market has increased, Japan's investors have moved beyond traditional asset classes into equity real estate and the outright purchase of companies. Conversely, foreign investment in Japan has also increased, but it remains confined largely to the equity and fixed-income asset classes.

All of this rapid change has provided a wealth of new investment opportunities, but it has made the task of managing a pension fund significantly more difficult. Administrators and trustees, facing a broad array of global investment opportunities, must be more knowledgeable than ever in order to be successful in the decade ahead.

Real estate 12% Fixed income 10.2% Special equities 5.8% Venture capital 2% Equities 70% The

Diversification in non-U.S.markets.

The Board's strategy
of diversifying among
and within asset
classes to maximize
returns and control
risk has guided the
structuring of PRIM's
international portfolio.



# The PRIM perspective

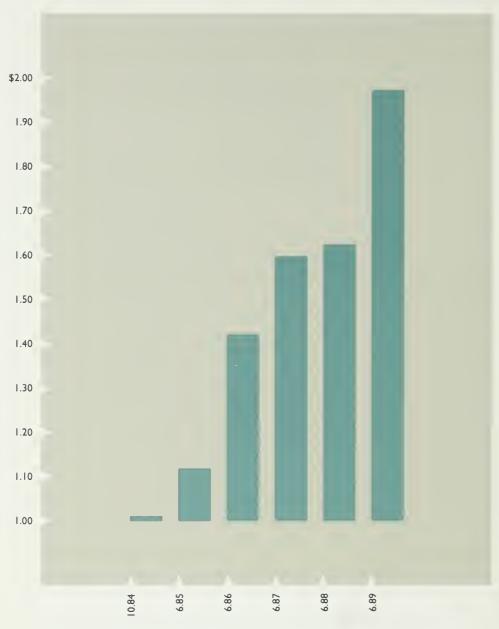
PRIM's mission—to reduce the huge unfunded liabilities facing state and local retirement systems—has mandated an agressive investment strategy. Board and staff determined that broad diversification among and within asset classes would serve to temper the risk associated with an asset allocation weighted more heavily toward equities than traditional fixed-income investments.

After completing the initial restructuring of the portfolio, the Board and staff began to look for ways to add additional value outside of the traditional asset classes. As early as 1985, the first investments in real estate and venture capital were made, followed by special equity (LBO) investment and expansion into non-U.S. equity markets.

1987 saw the development of the Massachusetts Housing Program, an in-state investment designed to stimulate the creation of multifamily rental housing. Diversification of the venture capital and real estate portfolios continued.

1988 was a pivotal year in terms of the growth and future direction of the PRIT Fund. A detailed review of all of the asset classes within the portfolio led to a decision to increase the Fund's involvement in foreign markets. The asset allocation to non-U.S. equity markets was increased from 10% to 14%, and new investments in European venture capital partnerships were completed.

The Board moved to increase its European exposure by investing in buyout funds as well as in a "special situations" fund. These funds are designed to benefit investors by taking positions in companies whose value will be enhanced by the elimination of trade barriers after 1992.



Con

Growth of a dollar.

A single dollar

invested in the PRIT

Fund at its inception

in October of 1984

would have grown to

\$1.89 by June 30, 1989.



In 1989 the Board undertook a detailed review of its international portfolios in light of the products that had not existed in 1986. It decided to replace the EAFE mandates of 1986 with regional mandates that would divide international investment equally between Europe and the Pacific Basin. Globalization of the PRIT Fund continued with participation in the JMB acquisition of the Randsworth portfolio, 35 high-quality properties located almost entirely in London's West End.

Plans for 1990 include investments in the emerging markets of Europe and the Pacific Basin, as well as a full review of the fund's domestic fixed-income strategy.

#### Conclusion

PRIM enters the 1990s well positioned for the challenges it will face. The process of creating and managing a global pension fund is well underway. Board and staff have developed a wealth of knowledge over the last five years, giving PRIM/PRIT a unique vantage point from which to assess new opportunities as they arise, particularly in light of investments already in the portfolio. PRIM's task will be to maintain and enhance this competitive edge as more institutional investors enter these markets.

PRIM appreciates and gratefully acknowledges the support of the local retirement systems that participate in the PRIT Fund, both houses of the Massachusetts Legislature, and the state's Executive Branch. While the confidence and support shown to date has been amply rewarded, PRIM/PRIT's primary goal continues to be ensuring security in retirement for the men and women whose retirement monies we manage. This is PRIM's challenge in the decade ahead.

Investment earnings
\$33,046,485

State appropriations
\$2,281,343

Net contributions
\$16,159,252

Initial transfer
\$49,051,907

Total value \$100,538,989

Participant profile.

The Norfolk County

Retirement system

has been a full partici-

pant since 1985.

Retirement systems

also have the option

of purchasing shares

in the Fund.

## Pension Reserves Investment Trust Fund Financial statements as of June 30, 1989 and June 30, 1988



Report of the independent public accountants

To the Pension Reserves Investment Management Board and Member Systems of the Pension Reserves Investment Trust Fund:

We have audited the accompanying balance sheet of the Pension Reserves Investment Trust Fund (a statutorily created entity established by the Commonwealth of Massachusetts with the enactment of Chapter 661 of the Acts of 1983, as amended by Chapter 697 of the Acts of 1987), including the schedule of investments, as of June 30, 1989 and 1988 and the related statements of operations and changes in net assets for the years then ended. These financial statements and schedule are the responsibility of the Fund's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. Our procedures included confirmation of securities owned as of June 30, 1989 and 1988, by correspondence with the custodian. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements and schedule referred to above present fairly, in all material respects, the financial position of the Pension Reserves Investment Trust Fund as of June 30, 1989 and 1988, and the results of its operations and the changes in its net assets for the years then ended, in conformity with generally accepted accounting principles.

As discussed in Note 2 to the financial statements, independent market values of real estate and alternative investments are not readily available. Real estate and alternative investments are included in the balance sheet at estimated market values determined by the real estate and alternative investment managers.

arthur Civileisen a Co

August 10, 1989.

#### Balance sheet

June 30

#### Assets

Investments at market value (cost of \$2,399,861,327 and \$2,172,510,547 at June 30, 1989 and 1988, respectively. (See *Schedule of investments*) (Note 2):

5

\$5.

\$5,6

5

\$5.57

\$5.579

**Equities** 

U.S. Government agency and Treasury obligations

Fixed income investments

Money market investments

Real estate

Alternative investments

International investments

Total investments

Cash

Dividend and interest receivable (Note 2)

Receivable for investments sold

Other assets

Total assets

#### Liabilities

Management fees payable (Note 3)

Payable for investments purchased

Other liabilities

**Total liabilities** 

# Commitments and contingencies

(Note 5)

#### Net assets

Fund units (2,133,176,935 and 1,928,510,743 *Capital Fund* units outstanding at June 30, 1989 and 1988, respectively, and 5,579,245 and 13,536,966 *Cash Fund* units outstanding at June 30, 1989 and 1988, respectively) (Notes 1, 2) Net unrealized gain on investments

**Total net assets** (equivalent to \$1.23 and \$1.16 per Capital Fund unit based on 2,133,176,935 and 1,928,510,743 units outstanding at June 30, 1989 and 1988, respectively, and \$1.00 per Cash Fund unit based on 5,579,245 and 13,536,966 units outstanding at June 30, 1989 and 1988, respectively)

The accompanying notes are an integral part of these financial statements.



		1989	1988
Cash Fund	Capital Fund	Total	Total
\$	\$ 992,310,948	\$ 992,310,948	\$ 819,288,920
_	481,074,969	481,074,969	456,454,217
_	251,077,041	251,077,041	191,201,285
5,582,238	98,979,151	104,561,389	160,788,090
	352,395,271	352,395,271	297,868,841
-	128,013,602	128,013,602	97,440,112
_	333,521,240	333,521,240	255,307,061
\$5,582,238	\$2,637,372,222	\$2,642,954,460	\$2,278,348,526
350	10,177	10,527	733
_	22,086,751	22,086,751	20,624,216
37,013	18,200,262	18,237,275	36,958,992
and the same of th	16,410	16,410	21,100
\$5,619,601	\$2,677,685,822	\$2,683,305,423	\$2,335,953,567
\$ —	\$ 1,333,464	\$ 1,333,464	\$ 58,840
_	30,175,838	30,175,838	60,071,697
40,356	15,519,259	15,559,615	15,745,326
\$ 40,356	\$ 47,028,561	\$ 47,068,917	\$ 75,875,863
\$5,579,245	\$2,387,564,128	\$2,393,143,373	\$2,154,239,725
	243,093,133	243,093,133	105,837,979
\$5,579,245	\$2,630,657,261	\$2,636,236,506	\$2,260,077,704

7 at 2).

Cash

t O,

8,

ts.

### Statement of operations

For the years ended June 30

		п
Investment income	Interest	
	Dividends	ı
	Real estate income	
	Alternative investment income	ı
	Security lending income (Note 6)	
	Total investment income	5
	Less:	
	Management fees (Note 3)	
	Interest expense	
	Other	
	Net investment income	\$
Realized and	Realized gain on investments	5
unrealized gain on	Increase (decrease) in unrealized gain on investments	
investments	Net gain (loss) on investments	5
State appropriations		 5
Increase in net	Total	5
assets resulting		=
from operations		



ı			1989	1988
	Cash Fund	Capital Fund	Total	Total
Ī	\$ 490,346	\$ 76,185,132	\$ 76,675,478	\$ 73,057,166
ľ	_	38,765,492	38,765,492	32,797,756
ľ	_	26,733,942	26,733,942	17,561,152
ı		3,859,224	3,859,224	3,271,840
ı		281,359	281,359	257,242
	\$ 490,346	\$145,825,149	\$146,315,495	\$126,945,156
	_	12,631,628	12,631,628	11,043,742
D		1,561,298	1,561,298	1,567,500
ľ	_	627,172	627,172	_
ì	\$ 490,346	\$131,005,051	\$131,495,397	\$114,333,914
ľ	\$ —	\$ 47,091,097	\$ 47,091,097	\$ 26,457,247
l.		137,255,154	137,255,154	(120,667,693)
ı	<u> </u>	\$184,346,251	\$184,346,251	\$ (94,210,446)
	\$ —	\$ —	\$ —	\$ 25,000,000
	Φ —	<b>.</b>	φ	\$ 23,000,000
	\$ 490,346	\$315,351,302	\$315,841,648	\$ 45,123,468

nts.

### Statement of changes in net assets

5

5

\$ 58

\$17.1 \$17.1

\$ 5.5

For the years ended June 30

From operations	Net investment income				
	Realized gain on investments				
	Increase (decrease) in unrealized gain on investments				
	State appropriations				
	Increase in net assets resulting from operations				
Distributions to	Net investment income				
member systems	Realized gain on investments				
from	State appropriations				
	Total distributions to member systems				
From fund unit	Proceeds from original unit sales				
transactions	Proceeds from subsequent unit sales				
	Net asset value of units issued to member systems in reinvestment of net				
	investment income, realized gain and state appropriations				
	Cost of units repurchased				
	Interfund transfers				
	Increase in net assets derived from fund unit transactions				
Net assets	Total increase (decrease) in net assets				
	Beginning of period				



			1989	1988
	Cash Fund	Capital Fund	Total	Total
	\$ 490,346	\$ 131,005,051	\$ 131,495,397	\$ 114,333,914
	_	47,091,097	47,091,097	26,457,247
	_	137,255,154	137,255,154	(120,667,693
	\$ 490,346	\$ 315,351,302	\$ 315,841,648	\$ 20,123,468
	_		_	25,000,000
	\$ 490,346	\$ 315,351,302	\$ 315,841,648	\$ 45,123,468
L				
	\$ (490,346)	\$ (131,005,051)	\$ (131,495,397)	\$ (114,333,914)
		(47,091,097)	(47,091,097)	(26,457,247)
			_	(25,000,000)
	\$ (490,346)	\$ (178,096,148)	\$ (178,586,494)	\$ (165,791,161)
	\$ 270,141	\$ 847,236	\$ 1,117,377	\$ 17,333,037
	58,021,688	42,979,726	101,001,414	204,551,557
	490,346	178,096,148	178,586,494	165,791,161
И	(41,356,637)	(445,000)	(41,801,637)	(36,575,692)
	(25,383,259)	25,383,259		
	\$ (7,957,721)	\$ 246,861,369	\$ 238,903,648	\$ 351,100,063
	\$ (7,957,721)	\$ 384,116,523	\$ 376,158,802	\$ 230,432,370
	13,536,966	2,246,540,738	2,260,077,704	2,029,645,334
	\$ 5,579,245	\$2,630,657,261	\$2,636,236,506	\$2,260,077,704

net

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## Pension Reserves Investment Trust Fund Notes to financial statements

June 30, 1989

Note I:
Description of the
Pension Reserves
Investment
Trust Fund

The Pension Reserves Investment Trust Fund (PRIT) was created in 1984 by the Commonwealth of Massachusetts through legislation (Chapter 661 of the Acts of 1983, as amended by the Acts of 1987) and is the investment portfolio for the assets of member state and local retirement systems. The Pension Reserves Investment Management Board (the Board) was created by the same legislation to manage PRIT. Operations of PRIT began October 1, 1984.

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Systems joining PRIT have the option to be Participating or Purchasing Systems. During the year ended June 30, 1989, one system entered PRIT as a Participating System and one entered as a Purchasing System, bringing the total number of Participating and Purchasing Systems to 17 and 11, respectively. Participating Systems must transfer all of their retirement system assets to PRIT. Purchasing Systems, along with the Participating Systems, share in the investment earnings of PRIT based on their proportionate share of net assets (see Note 2).

PRIT consists of two funds, the Capital Fund and the Cash Fund. The Capital Fund serves as the long-term asset portfolio. The portfolio asset allocation plan includes stocks, bonds, money market investments, international investments, real estate and other alternative investments. The Cash Fund consists of short-term investments which are used to meet the liquidity requirements of the various Participating and Purchasing Systems.

Note 2: Summary of significant accounting policies The following is a summary of significant accounting policies followed by PRIT, which are in conformity with those generally accepted in the industry:

**Valuation of investments** Security transactions are recorded on the trade date of the securities purchased or sold. The cost of a security is the purchase price or, in the case of assets transferred to PRIT by a new system, the market value of the securities on the transfer date. The Capital Fund is valued at month-end, while the Cash Fund is valued daily.

Investments in bonds and U.S. Government agency and Treasury obligations are valued by an independent pricing service. In determining the price, the service reflects such factors as security prices, yields, maturities and ratings, supplemented by dealer quotations. Money market and other short-term investments, both domestic and international, are recorded using the amortized cost method, which approximates market value. Domestic and international investments in equity securities traded on national securities exchanges are valued at the last sale price or, if no sale, at the closing bid price. Securities traded on any other exchange are valued in the same manner or, if not so traded, on the basis of closing over-the-counter bid prices. Investments in real estate are valued by the real estate investment managers at estimated market values as of June 30, 1989. Alternative investments include venture capital, leveraged buyouts, private placements and other investments where the structure, risk profile and return potential differ from traditional equity and fixed income investments.



Note 2:
Summary of
significant
accounting policies,
continued

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30, priThese investments are valued at fair value, as determined in good faith by the Board, since there are no market quotes available. All alternative investments are stated at book value, which approximates fair value, until significant subsequent events require a change.

Dividend income is recorded on the ex dividend date and interest income is recorded when earned.

Gains and losses from sales of investments are calculated on the average cost method.

#### **Fund** units

Capital Fund: The number of units resulting from the initial transfer of a retirement system's assets to PRIT or from the subsequent sales or repurchases of units is calculated by dividing the market value of the assets involved by the unit price at the end of the month.

Net investment income and net realized gains are reinvested in units at the end of each month as follows:

- Net investment income and net realized gains for the month are allocated between the systems based on their proportionate share of the net assets at the beginning of the month.
- The allocated portions are then divided by the beginning-of-the-month unit price, adjusted for the change in unrealized appreciation (depreciation) of investments during the current month, to determine each system's incremental number of units.
- If the Capital Fund incurs net realized losses, the losses are allocated between
  the systems using the same method as for gains, thereby reducing the number of
  units held by each system.

Cash Fund: Sales and repurchases of units by the systems are recorded in the Cash Fund on the trade date at the fund's daily price of \$1.00 per unit. Net investment income is allocated daily between the systems based on their proportionate share of net assets and is reinvested in units at month-end.

#### Note 3: Management fees

In accordance with the Board's Operating Trust, all expenses incurred by the Board in managing PRIT are charged to PRIT in the form of management fees. These fees primarily consist of investment manager, advisory and professional fees, salaries and other operating expenses of the Board.

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Investment managers Investment management fees are paid to all of PRIT's fully discretionary external asset managers pursuant to written contractual arrangements. The fees for equity and fixed income managers are calculated and paid on a quarterly basis based upon the net asset value of each manager's portfolio. In some cases, managers are paid on a "performance fee" basis, characterized by a low base fee, with an incremental fee paid on a quarterly basis in the event that a manager outperforms the contractual benchmark mutually agreed upon.

Real estate management fees are structured differently. The "open" and "closed-end" funds charge fees that are not generally negotiable, based on net asset value. The separate account relationships which PRIT has negotiated are typified by fees which are lower than normal during the hold period of the investment, with a performance fee component paid when the original investment is terminated or otherwise restructured.

Venture Capital and Special Equity managers charge fees during the investment hold period based on total assets committed. Fees are payable commencing on the date that the partnership closes.

Investment management fees totaled \$9,258,927 and \$7,562,919 for the years ended June 30, 1989 and 1988, respectively.

Investment advisor Wilshire Associates (Wilshire) serves as the Board's pension advisor. Wilshire provides the Board with comprehensive pension investment advisory services, including recommendations on asset allocation, development of objectives, policies and guidelines for the Board and for the individual investment managers selected by the Board, assistance in the screening, interviewing and selection of investment managers, and measurement of external and internal performance of PRIT and the individual investment managers. Wilshire received fees of approximately \$249,000 and \$228,100 for the years ended June 30, 1989 and 1988, respectively.

Investment custodian State Street Bank and Trust Company (State Street) is the PRIT investment custodian and recordkeeper. State Street records all daily transactions for PRIT, including investment sales and purchases, investment income, expenses incurred by PRIT and all fund unit activity for the PRIT member systems. State Street also provides portfolio performance analysis. State Street receives an annual asset fee based on the market value of the PRIT fund.

State Street's compensation totaled approximately \$1,188,000 and \$1,025,000 for the years ended June 30, 1989 and 1988, respectively.



Note 4: Purchases and sales of investments During the year ended June 30, 1989, the cost of investments purchased and the proceeds from investments sold, excluding short-term investments, were \$2,937,368,050 and \$2,825,909,100, respectively. During the year ended June 30, 1988, the cost of investments purchased and the proceeds from investments sold, excluding temporary investments, were \$3,723,154,144 and \$3,405,357,616, respectively.

Note 5: Commitments and contingencies As of June 30, 1989, PRIT had outstanding commitments to invest \$69 million in real estate, \$147 million in alternative investments and \$35 million in domestic equity investments.

Note 6: Securities lending program

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nember Street In fiscal 1987, PRIT joined State Street's securities lending program. Under this program, PRIT receives a fee for allowing brokerage firms to borrow certain of its securities for a predetermined period of time, securing such loans with cash collateral equaling 102% of the market value of the securities borrowed. All collateral is held by State Street. At June 30, 1989, the market value of securities on loan was approximately \$42.3 million for equities, \$47.6 million for fixed income investments and U.S. Government agency and Treasury obligations. These securities are included in investments at market value as of June 30, 1989 in the accompanying balance sheet.

### Pension Reserves Investment Trust Fund Schedule of investments\* as of June 30, 1989

**Domestic investments** 

Shares



Market

value

Cost

Snares			Cost		value
	Equities				
2,484,549	Basic industries	\$	81,119,762	\$	88,179,325
1,555,786	Capital goods		41,024,012		50,669,408
370,980	Conglomerates		17,208,917		20,859,862
2,570,869	Consumer basics		75,760,346		110,642,339
1,252,735	Consumer durable goods		41,429,669		44,958,382
2,436,436	Consumer nondurables		64,802,331		81,287,104
1,267,677	Consumer services		34,642,702		48,926,186
1,810,607	Energy		58,220,031		71,255,919
3,419,825	Finance		107,735,119		121,693,240
1,266,683	General business		35,851,713		49,276,685
	Shelter				
521,729			11,118,195		14,974,057
3,240,587	Technology		116,290,622		111,773,168
1,490,450	Transportation		29,131,996		30,511,867
4,025,136	Utilities		100,859,933		139,078,232
1,187,475	Miscellaneous		7,390,833		8,225,174
	Total equities	\$	822,586,181	\$	992,310,948
Principal					Market
amount			Cost		value
arribarre	Fixed income investmen	ts			7 41 40
	Corporate bonds:				
\$ 81,719,250	Finance and banking with	\$	80,848,629	\$	81,475,084
Φ 01,717,230	rates ranging from 6.85%	Ψ	00,010,027	Ψ	01, 17 3,00 1
	to 15.625% and maturities				
	ranging from 1990 to 2018				
72 242 212	Industrials with variable		58,401,265		57,265,580
72,262,213			30,401,203		37,263,360
	rates and rates ranging				
	from 4.625% to 17.75%				
	and maturities ranging				
	from 1990 to 2017				
46,445,000	Utilities with variable and		41,396,602		44,068,677
	fixed rates ranging from				
	3.25% to 13.00% and				
	maturities ranging from				
	1990 to 2019				
4,365,000	Transportation with rates		4,068,281		4,390,454
	ranging from 4.50% to				
	13.15% and maturities				
	ranging from 1990 to 2016				
61,658,144	Other with rates ranging		54,940,275		52,115,786
	from 5.3% to 16.00% and				
	maturities from 1992 to				
	2017				
	Total corporate bonds	\$	239,655,052	\$	239,315,581



Principal		Cost	Market
amount	Final in a partition of the cartes		value
295,000	Fixed income investments Utilities with rates ranging from 5.63% to 10.00% and maturities ranging from 1997 to 2000		\$ 293,679
7,688,000	Municipals with rates ranging from 4.375% to 13.00% and maturity ranging from 1991 to 2008	7,599,748	7,640,612
747,142	Insurance contracts with rates ranging from 10.31% to 18.02% and maturities ranging from 1990 to 1993	683,809	683,809
3,200,000	Miscellaneous with rates ranging from 8.10% to 9.00% and maturities ranging from 2000 to 2002	3,093,560	3,143,360
	Total fixed income	251,284,903	\$ 251,077,041
\$ 5,078	U.S. Government agency and Treasury obligations Farmers Home \$ Administration Insured Notes with a rate of 9.875% and maturing in	5,058	\$ 3,891
20,530,000	Federal Farm Credit Banks with rates ranging from 7.55% to 14.10% and maturities ranging from 1989 to 1993	21,704,067	21,058.379
7,000,000	Federal Home Loan Banks with rates ranging from 11.75% to 12.50% and maturities ranging from 1990 to 1993	6,878,750	7,633,420
3,959,730	Federal Home Loan PC with rates ranging from 8.50% to 8.75% and maturities ranging from 2000 to 2001	3,930,570	3,824,684
771,721	Federal Home Loan Pools with a rate of 6.25% and maturing in 2003	661,751	657,406
3,275,000	Federal Home Loan Mortgage Corporation with a rate of 9.50% and maturing in 2018	3,139,836	3,325,173

arket 37,325 3,408 3,862 2,339 3,382 7,104 6,186 6,186 6,6685 4,057 3,240 6,6685 1,867 8,232 5,174 0,948

larket value

5,084

55,580

68,677

90,454

15,786

3 | 5,58 |

Principal			Market
amount		Cost	value
	U.S. Government agency		
	and Treasury obligations		
\$ 14,791,330	Federal National Mortgage	\$ 12,945,474	\$ 13,232,703
	Association with rates		
	ranging from 5.00% to		
	10.875% and maturities		
(0 (15 000	ranging from 1990 to 2007	E0 (4E 0E2	(0.413.747
60,615,080	Government National	59,645,953	60,413,747
	Mortgage Association with		
	rates ranging from 7.00% to 16.00% and maturities		
	ranging from 2000 to 2019		
7,500,000	Financing Corporation	6,664,785	7,118,225
7,500,000	CPN FICO strips with	0,007,703	7,110,223
	variable rates and		
	maturities ranging from		
	1989 to 1990		
82,395	Small Business Administration	n 82,395	82,395
	with a rate of 9.875% and		
	maturing in 1993		
4,000,000	Student Loan Marketing	4,206,219	4,042,350
	Association with rates		
	ranging from 8.45% to		
	10.90% and maturities in		
	1990		
108,513,000	United States Treasury	122,316,777	131,127,460
	Bonds with rates ranging		
	from 8.75% to 13.25% and		
	maturities ranging from		
1,000,000	1995 to 2019	722 500	005 570
1,000,000	United States Treasury Certificates with variable	732,580	805,570
	rates and maturing in 1992		
173,380,000	United States Treasury	175,634,334	178,873,427
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Notes with rates ranging	,	,
	from 6.625% to 12.25%		
	and maturities ranging		
	from 1989 to 1999		
41,255,000	United States Treasury	27,185,169	30,574,056
	Securities with variable		
	rates and maturities		
	ranging from 1990 to 1997		
18,269,477	Other collateralized	17,742,301	18,302,083
	mortgage obligations with		
	rates ranging from 9.05%		
	to 15.25% and maturities		
	ranging from 2012 to 2018  Total U.S. Government		
	agency and Treasury		
	obligations	\$ 463,476,019	\$ 481,074,969
30			



					Market
			Cost		value
	Money market				
	State Street Short-term				
	Investment Fund	\$	62,692,000	\$	62,692,000
	Certificates of deposit		10,930,224		10,930,224
	Commercial paper		30,384,187		30,382,982
	Massachusetts Municipal				
	Depository Trust		556,183		556,183
	Total money market	\$	104,562,594	\$	104,561,389
	Real estate				
	Retail	\$	113,404,869	\$	116,290,439
	Industrial		89,349,291		91,622,771
	Office		82,476,268		84,574,865
	Residential		24,055,578		24,667,669
	Land		13,746,045		14,095,811
	Other		20,619,067		21,143,716
	Total real estate	\$	343,651,118	\$	352,395,271
		-		-	
	Alternative investments				
	Equities	\$	36,502,622	\$	45,014,250
	Debt		23,770,165		26,081,786
	Cash, cash equivalents and				
	Treasury obligations		38,382,283		38,382,283
	Limited partnership				
	interests		16,617,714		18,138,095
	Other		361,778		397,188
	Total alternative				
	investments	\$	115,634,562	\$	128,013,602
		-		÷	
	International investments				Market
Units			Cost		value
	Equities				
4,180,242	Basic industries	\$	20,266,821	\$	26,184,055
1,701,471	Capital goods		21,593,932		25,762,547
244,520	Commingled		1,985,693		2,735,514
725,025	Conglomerates		2,884,237		3,184,247
1,903,143	Consumer basics		19,639,137		24,298,909
1,210,813	Consumer durable goods		15,891,697		16,669,964
2,771,236	Consumer nondurable		23,505,953		24,789,477
	goods				
1,349,145	Consumer services		7,077,216		7,181,975
1,146,726	Energy		5,569,222		6,547,676
5,492,838	Finance		38,003,179		42,603,677
100,000	Forestry		641,254		547,961

rket

,703

,747

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395

,350

,460

570

3,427

4,056

2.083

4,969

## Schedule of investments, continued



						Marke
	Units			Cost		value
	Onico	International investmen	ts. c		_	Value
\$	1,193,259	General business	,	13,877,101		15,680,294
	996,746	Shelter		6,962,002		9,766,28
	1,259,444	Technology		11,931,367		12,503,328
	793,054	Transportation		5,110,314		5,707,53
	2,255,249	Utilities		13,417,175		15,807,59
	9,239,890	Miscellaneous		23,023,262		27,362,63
		Total equities	\$	231,379,562	\$	267,333,67
		Foreign government Treasury obligations Government and supranational with rates ranging from 8.25% to 14.625% and maturities from 1991 to 2002 Treasury notes with rates ranging from 3.9% to 12.5% and maturities ranging from 1992 to 2001 Total foreign government treasury obligations	\$	5,798,718 35,540,303 41,339,021	\$	5,882,02. 34,655,196 40,537,22.
-		Fixed income	•	656,376	•	646,993
		Corporate bonds with rates ranging from 7% to 9% and maturities ranging from 1990 to 1997	\$	030,370	\$	070,77.
		Utilities with a rate of 7% maturing in 1991		1,867,500		1,920,000
		Japan Financing Corporation with a rate of 10.5% maturing in 1995		1,700,060		1,803,600
		Total fixed income	\$	4,223,936	\$	4,370,59:
-		Money market				
		Various foreign cash and	•	21 723 431	¢	21,279,75
		cash equivalents	\$	21,723,431	\$	21,279,75.
		Total money market	\$	21,723,431	4	21,2/7,/3.
-		Total investments	\$2	2,399,861,327	\$2	2,642,954,460
			-			

<sup>\*</sup> See Note 2

Note: A detailed portfolio listing is available for review at the Pension Reserves Investment Management Board's office.

The accompanying notes are an integral part of these financial statements.

The members of the Pension Reserves Investment Management Board consist of designated representatives of the Governor and the State Treasurer, as well as elected and appointed representatives of state, county and municipal employees. By law, one member must be a private citizen experienced in the field of investment or financial management, one must be a person who is not an employee or officer of the Commonwealth, two must be representatives of employee organizations, two must be elected by state employees and teachers, and one must be the Commissioner of Public Employee Retirement Administration. Members serve without compensation. John F. Gallahue, Chairman, is appointed by the State Treasurer and is the Executive Director of the MBTA Retirement Fund.

Joseph Bonavita, appointed by the State Treasurer, is Executive Director of the American Federation of State, County and Municipal Employees, Council 93, AFL-CIO. Term expires 4/27/92.

Robert Brousseau, elected by the members of the State Teachers' Retirement System, is a teacher in the Wareham public schools. Term expires 7/20/90.

Arthur J. Gutierrez, appointed by the State Treasurer, is President of The Gutierrez Company, a real estate development firm, located in Burlington, Massachusetts. Term expires 6/5/89.

William Jones, appointed by the Governor, is the Executive Director of the Codman Square Housing Development Corporation. Term expires 2/1/92.

Paul M. Lestage, appointed by the Governor, is the Secretary/Treasurer of the Professional Firefighters of Massachusetts. Term expires 3/30/91.

John J. McGlynn, Vice Chairman, is the Commissioner of the Division of Public Employee Retirement Administration. Ex-officio

Daniel J. Sullivan, a designee of the Governor, is the Secretary for Human Resource Administration, Executive Office for Administration and Finance. Ex-officio member.

Ralph W. White, elected by the members of the State Retirement System, is President of the Retired State, County and Municipal Employees Association of Massachusetts. Term expires 7/20/90.

Pension Reserves

**Management Board** 

Boston, Massachusetts

Investment

617 439-4600

The roll Board's office, are local dat 200 State Street. Boston. The staff is comprised of professionals and support personnel with qualifications in the fields of finance, modern portfolio management, law, business administration, accounting, and retirement board administration. Each member of the senior staff is responsible for a component of the overall agency operation.

Paul F. Quirk
Executive Director

Daniel J. Kelly
Deputy Director
General Counsel

Philip D. Kett Chief Investment Officer

Elizabeth A. McLaughlin Director of Finance

Legal counsel
Mintz, Levin, Cohn, Ferris, Glovsky & Popeo, P.C., Dr., Boston

Fund advisor
Wilshire Associates, Santa Monica

Equity managers
Alliance Capital Management Corporation, New York City
Bear, Stearns & Co., New York City
The Boston Company Institutional Investors, Inc., Boston
Lazard Freres Asset Management, New York City
Trinity Investment Management Corp., Boston
United States Trust Co. of Boston, Boston

Fixed income managers
Baring America Asset Management Company, Inc., Boston
Lehman Management Co., Inc., New York City
One Federal Asset Management, Inc., Boston
The Putnam Advisory Company, Inc., Boston
M.D. Sass Investors' Services, Inc., New York City

International managers
Baring International Asset Management, Ltd., London
Oechsle International Advisors, Boston
N.M. Rothschild International Asset Management, Ltd., London
Schroeder Capital Management International Inc., London
Scudder, Stevens & Clark, New York
State Street Bank and Trust Company, Boston

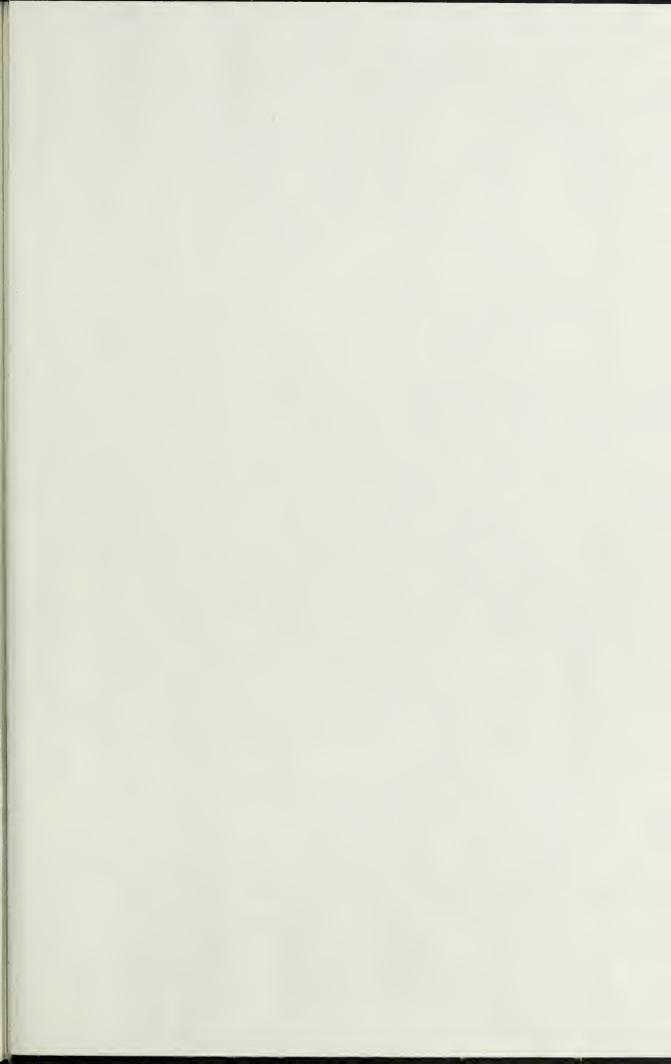
Real estate managers
Aldrich, Eastman & Waltch, Boston
Bank of Boston, Boston
Copley Real Estate Advisors, Inc., Boston
Heitman Advisory Corp., Chicago
JMB Institutional Realty Corporation, Chicago
John Hancock Mutual Life Insurance Co., Boston
The Lomas & Nettleton Advisory Group, Dallas
Massachusetts Mutual Life Insurance Co., Springfield
Trust Company of the West, Los Angeles

Venture capital managers
Advent International Corp., Boston
Alan Patricof Associates, London
Commonwealth Bioventures, Boston
Davis Venture Partners, Tulsa
Forstmann Little & Co., New York City
Golder, Thoma and Cressey, Chicago
John Hancock Venture Capital Management, Inc., Boston
Kohlberg, Kravis & Roberts and Co., New York City
Morgan Holland, Boston
Southern California Ventures II, San Diego
TA Associates, Boston
Venture Capital Fund of N.E., Boston
Vista Ventures, New Canaan

Independent public accountants Arthur Andersen & Co., Boston

Master trustee
State Street Bank and Trust Company, Boston

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ACME BOOKBINDING CO., INC.

JAN 5 1992

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